

S/M No : TCM405FEF0

Service Manual

Color Television

| | |
|---------|--------------|
| CHSSIS | MODEL |
| CM-405F | DTH-2930SSFV |



Caution

: In this Manual, some parts can be changed for improving. their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center.



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SAFETY PRECAUTIONS

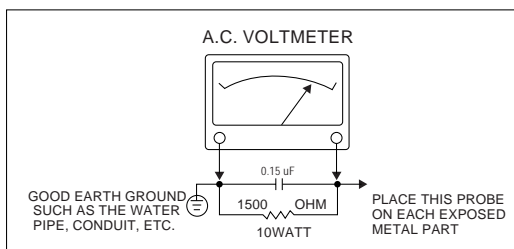
CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY. NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY. SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER. WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED, A CHECK SHOULD BE MADE OF THE FOLLOWING:

SUBJECT: FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE, THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OF SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS, FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD), AND REPLACE IF NECESSARY. FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECEIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUDING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTOR, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES. DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET. (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS, HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER : CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150V A.C. TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED .75 VOLTS R.M.S THIS CORRESPONDS TO 0.5 MILLIAMPS A.C. ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.



SUBJECT : GRAPHIC SYMBOLS



THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION ON SERVICE LITERATURE.

SUBJECT : X-RADIATION

1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RAYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
2. ONLY FACTORY SPECIFIED C.R.T ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS X-RAY SHIELD IN COLOR SETS. ALWAYS RE-INSTALL THEM.
3. IT IS ESSENTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRATION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD. SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED, THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY. WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE, AND THAT THE HIGH VOLTAGE READING BE RECORDED ON EACH CUSTOMER'S INVOICE.
5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE, AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY. DO NOT OPERATE THE PRODUCT LONGER THAN IS NECESSARY TO LOCATE THE CAUSE OF EXCESSIVE VOLTAGE.
6. REFER TO HV, B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS (WHERE USED).

SUBJECT : IMPLOSION

1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTEGRAL IMPLOSION PROTECTION SYSTEM. BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION. AVOID SCRATCHING THE TUBE. OF SCRATCHED REPLACE IT.
2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE, OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PLACEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT, MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS. A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERALLY APPROVED FOR USE WITH T.V.S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SAFETY PRECAUTIONS

CAUTION : Do not attempt to modify this product in any way. Unauthorized modifications will not only void the warranty, but may lead to your being liable for any resulting property damage or user injury.

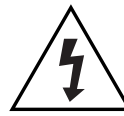
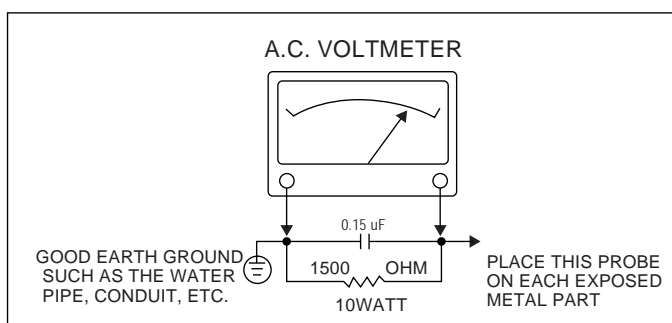
Service work should be performed only after you are thoroughly familiar with all of the following safety checks and servicing guide-lines. To do otherwise, increases the risk of potential hazards and injury to the user.

SAFETY CHECKS

After the original service problem has been corrected, a check should be made of the following:

SUBJECT : FIRE & SHOCK HAZARD

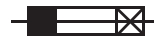
1. Be sure that all components are positioned in such a way as to avoid possibility of adjacent component shorts. This is especially important on those chassis which are transported to and from the repair shop.
2. Never release a repair unless all protective devices such as insulators, barriers, covers, shields, strain reliefs, and other hardware have been reinstalled per original design.
3. Soldering must be inspected to discover possible cold solder joints, frayed leads, damaged insulation (including A.C. cord), solder splashes or sharp solder points. Be certain to remove all loose foreign particles.
4. Check for physical evidence of damage or deterioration to parts and components, and replace if necessary follow original layout, lead length and dress.
5. No leads or components should touch a receiving tube or a resistor rated at 1 watt or more. Lead tension around protruding metal surfaces must be avoided.
6. All critical components such as fuses, flameproof resistors, capacitors, etc. must be replaced with exact factory types. Do not use replacement components other than those specified or make unrecommended circuit modifications.
7. After re-assembly of the set always perform an A.C. leakage test on all exposed metallic parts of the cabinet, (the channel selector knob, antenna terminals, handle and screws) to be sure the set is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this test. Use an A.C. voltmeter, having 5000 ohms per volt or more sensitivity, in the following manner : connect a 1500 ohm 10 watt resistor, paralleled by a 15 mfd. 150V A.C. type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the A.C. voltage across the combination of 1500 ohm resistor and 0.15 MFD capacitor. Reverse the A.C. plug and repeat A.C. voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75 volts R.M.S. This corresponds to 0.5 milliamp A.C. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the service personnel to the presence of uninsulated "dangerous voltage" that may be of sufficiently magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the service personnel to the presence of important safety information in service literature.



Fuse symbol is printed on pcb adjacent to the fuse, with "RISK OF FIRE REPLACE FUSE AS MARKED". The symbol is explained in the service manual with the following wording or equivalent.

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE (5A, 250V)" and **ATTENTION:** AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET DE "5A, 250V".

SUBJECT : X-RADIATION

1. Be sure procedures and instructions to all service personnel cover the subject of X-rays in current T.V. receivers is the picture tube. However, this tube does not emit X-rays when the high voltage is at the factory specified level. The proper value is given in the applicable schematic. Operation at higher voltages may cause a failure of the picture tube or high voltage supply and, under certain circumstances, may produce radiation in excess of desirable levels.
2. Only factory specified C.R.T. anode connectors must be used. Degaussing shields also serve as X-ray shield in color sets. Always re-install them.
3. It is essential that the serviceman has available an accurate and reliable high voltage meter. The calibration of the meter should be checked periodically against a reference standard. Such as the one available at your distributor.
4. When the high voltage circuitry is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be run up and down while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly. We suggest that you and your service organization review test procedures so that voltage regulation is always checked as a standard servicing procedure. And that the high voltage reading be recorded on each customer's invoice.
5. When troubleshooting and making test measurements in a receiver with a problem of excessive high voltage, avoid being unnecessarily close to the picture tube and the high voltage compartment. Do not operate the chassis longer than is necessary to locate the cause of excessive voltage.
6. Refer to HV, B+ and Shutdown adjustment procedures described in the appropriate schematic and diagrams (where used).

SAFETY PRECAUTIONS

SUBJECT : IMPLOSION

1. All direct viewed picture tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage during installation. Avoid scratching the tube. If scratched, replace it.
2. Use only recommended factory replacement tubes.

SUBJECT : TIPS ON PROPER INSTALLATION

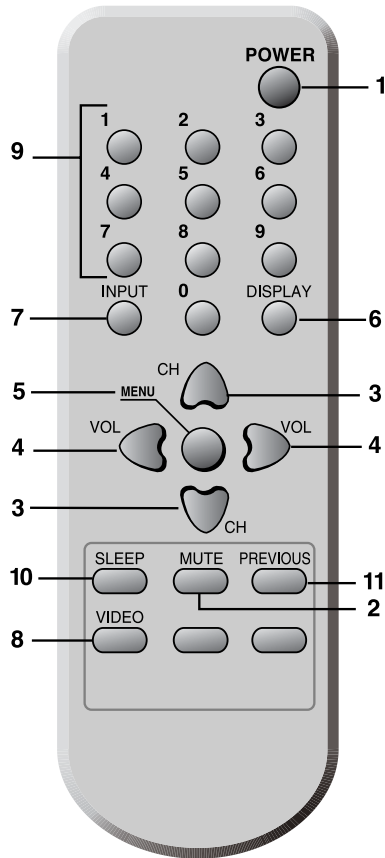
1. Never install any receiver in closed-in recess, cubbyhole or closely fitting shelf space over, or close to heat duct, or in the path of heated air flow.
2. Avoid conditions of high humidity such as : Outdoor patio installations where dew is a factor. Near steam radiators where steam leakage is a factor, etc.
3. Avoid placement where draperies may obstruct rear venting. The customer should also avoid the use of decorative scarves or other coverings which might obstruct ventilation.
4. Wall and shelf mounted installations using a commercial mounting kit, must follow the factory approved mounting instructions. A receiver mounted to a shelf or platform must retain its original feet(or the equivalent thickness in spacers) to provide adequate are flow across the bottom, bolts or screws used for fasteners must not touch and parts or wiring. Perform leakage test on cus-tomized installations.
5. Caution customers against the mounting of a receiver on sloping shelf or a tilted position, unless the receiver is properly secured.
6. A receiver on a roll-about cart should be stable on its mounting to the cart. Caution the customer on the hazards of trying to roll a cart with small casters across thresholds or deep pile carpets.
7. Caution customers against the use of a cart or stand which has not been listed by underwriters laboratories, inc. For use with their specific model of television receiver or generically approved for use with T.V.'s of the same or larger screen size.

SPECIFICATION

| Item | Model | DTH-2930SSFV |
|---------------------------|-------|--|
| CHASSIS | | CM-405F |
| TV Standard | | NTSC-M, PAL-M, PAL-N |
| Power Input | | AC 110-220V, 50/60Hz |
| Power Consumption | | 110W |
| Tuning System | | Frequency Synthesizer(FS) Tuning System |
| Tuning Ranges | | TV VHF(L) : CH2 - CH6 UHF(H) : CH7 - CH13 UHF : CH14 - CH69 CATV VHF(L) : 5A, A,B,A-5-A-1,CH2-CH6 VHF(H) : C-W+11,CH7 - CH13 UHF : W+12-W+84" |
| Sound Output | | 6W + 6W |
| Speaker | | 8 ohm 12W x 2EA |
| Antenna Input Impedance | | 75 ohm Unbalanced |
| Auxiliary Input Terminal | | Side : Video, Audio(L,R) - AV2 Rear : Video, Audio(L,R) - AV1 S-Video Y, Cb, Cr, Audio(L,R) - CVI |
| Auxiliary Output Terminal | | Rear : Video, Audio(L,R) - MONITOR OUT |
| Intermediate Frequencies | | Picture IF Carrier Frequency : 45.75MHz Sound IF Carrier Frequency : 41.25MHz Color Sub-Carrier Frequency : NTSC-M : 3.579545 Mhz PAL-N : 3.582056 Mhz PAL-M : 3.575611 Mhz |
| Remote Control | | R-48C04/R-48C12(AAA) |
| Special Function | | 1) Closed Caption 2) Channel Label |

ALIGNMENT INSTRUCTION

Your Remote Control(R-48C04)



1. POWER

Use this button to turn your TV on or off.

2. MUTE

Use to turn the TV's sound on and off.

3. ▼ CH ▲

Use these buttons to change channels on your TV, or select items in the menu system.

4. ◀ VOL ▶

Use these buttons to change your TV's volume, to activate selections in the menu system, or to change audio and video settings.

5. MENU

Use this button to turn the TV's menu system on and off.

6. DISPLAY

Use this button to display the present status.

7. INPUT

Use this button to select the TV's signal source.

8. VIDEO

Use this button to display video adjustment items.

9. 0-9

Use these buttons to change channels.

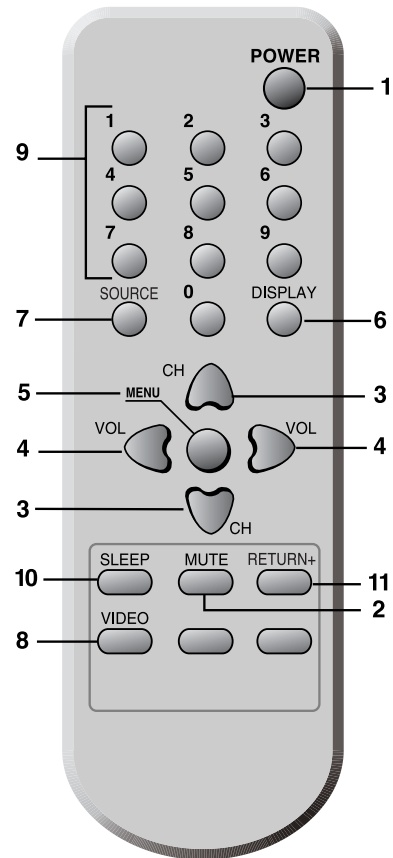
10. SLEEP

Use this button to program the TV to turn off after a certain time.

11. PREVIOUS

Use this button to return to the previous channel you were watching.

R-48C12



1. POWER

Use this button to turn your TV on or off.

2. MUTE

Use to turn the TV's sound on and off.

3. ▼ CH ▲

Use these buttons to change channels on your TV, or select items in the menu system.

4. ◀ VOL ▶

Use these buttons to change your TV's volume, to activate selections in the menu system, or to change audio and video settings.

5. MENU

Use this button to turn the TV's menu system on and off.

6. DISPLAY

Use this button to display the present status.

7. SOURCE

Use this button to select the TV's signal source.

8. VIDEO

Use this button to display video adjustment items.

9. 0-9

Use these buttons to change channels.

10. SLEEP

Use this button to program the TV to turn off after a certain time.

11. RETURN+

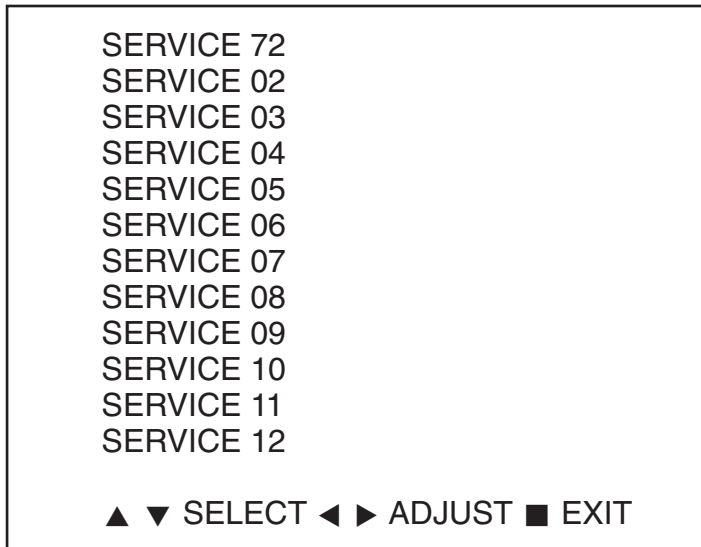
Use this button to return to the previous channel you were watching.

ALIGNMENT INSTRUCTION

1. SERVICE MODE ADJUSTMENTS

Follow the steps below whenever service adjustment is required.
See Table- A and Table- B to determine if service adjustments are required.

- 1) How to enter the service mode using the user remote control.
 - Turn the set on.
 - Direct the remote control to the reception window of TV.
 - Push buttons of remote control in sequence as follows.
1 → MUTE → DISPLAY → MUTE
 - Then, the screen will appear as follows.



- Using the channel up or channel down button, select the item you wish to adjust. (The color of selected item turns into the blue.)
 - Press the volume up or down button to enter in the service mode you wish to adjust.
- 2) How to memorize the adjusted values in the service mode.
 - Don't have to press any button the state which the screen is displaying each of service menus after all adjustments are completed each of all service menu.

Table-A : Adjust the values of service mode when a part is replaced.

| PART REPLACED | ADJUSTMENT | | NOTES |
|------------------|------------|-------------|---|
| | NECESSARY | UNNECESSARY | |
| I701 (U-COM) | | ○ | Data is stored in I702. |
| I702 (EEPROM) | ○ | | Initial setting values are written from I701. ADJUSTING ITEMS S6 : Geometry adjustmrnt S8 : White balance S9 : Subbrightness |
| CRT | ○ | | Adjust items related to picture tube only. (White Balance adjustment) CRT OPTION (Screen Option adjustment) |

CM-405F EEPROM DATA

| 항목 | NAME | LG - CBU 060419 | LG - GRADIENTE 060426 | 항목 | NAME | LG - CBU 060419 | LG - GRADIENTE 060426 | | | | | | | | | | | | | | | | | | | |
|--------------|---------------|--------------------|--------------------------|--|---------------|--------------------|--------------------------|----|------|---------|------|-----|---------------|-----|----------|----------|-----|----------|----------|-----|----------|-----------|---------|----------|----------|---------|
| S1 | HEAT RUN | ON -->OFF | | S7-2 | SOC | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| S2 | SCREEN 전압 조정 | 650V (6AE:0A) | 650V (6AE:0A) | | PWLDAC | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| S5 | AGC AUTO | Off | Off | | CL | 10 | 10 | | | | | | | | | | | | | | | | | | | |
| | AGC LEVEL | 22 | 22 | | CLD | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| | IFOFF | 37 | 37 | | GAM | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| | QSS | 1 | 1 | | HCT | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| | BPB | 1 | 1 | | ACL | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| | FMI | 1 | 1 | | BPS | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| | AGN | 0 | 0 | | CHSE | 2 | 2 | | | | | | | | | | | | | | | | | | | |
| | BPBS | 1 | 1 | | CBPS | 1 | 1 | | | | | | | | | | | | | | | | | | | |
| | DSG | 0 | 0 | | CB | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| Fine Tunning | | | | | S8 | R-GAIN | 32 | 32 | | | | | | | | | | | | | | | | | | |
| S6 | V.SLOPE | 27 | 27 | G-GAIN | | 32 | 32 | | | | | | | | | | | | | | | | | | | |
| | V.CENTER | 40 | 40 | B-GAIN | | 40 | 40 | | | | | | | | | | | | | | | | | | | |
| | V.SIZE | 32 | 32 | R-BIAS | | 32 | 32 | | | | | | | | | | | | | | | | | | | |
| | H.CENTER | 38 | 38 | G-BIAS | | 32 | 32 | | | | | | | | | | | | | | | | | | | |
| | H.SIZE | 52 | 52 | SRC R-BIAS | | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| | V.LINEARITY | 38 | 38 | SRC G-BIAS | | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| | S_CORRECTION | 30 | 30 | CVI R-BIAS | | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| | H.PARALLEL | 24 | 24 | CVI G-BIAS | +8 | +8 | | | | | | | | | | | | | | | | | | | | |
| | H-BOW | 36 | 36 | S9 | DP-Brightness | 17 | 17 | | | | | | | | | | | | | | | | | | | |
| | PARABOLA | 40 | 40 | | DP-Contrast | 17 | 17 | | | | | | | | | | | | | | | | | | | |
| | EW TRAPEZ | 30 | 30 | | DP-Color | 4 | 4 | | | | | | | | | | | | | | | | | | | |
| | CORNER TOP | 45 | 45 | | DP-Sharpness | 17 | 17 | | | | | | | | | | | | | | | | | | | |
| | CORNER BOTTOM | 45 | 45 | S10 | OPTION 1 | 1111 0101 | 1111 0101 | | | | | | | | | | | | | | | | | | | |
| | 50Hz.HC | +8 | +8 | | OPTION 2 | 0110 0011 | 0110 0011 | | | | | | | | | | | | | | | | | | | |
| | 50Hz.HS | +1 | +1 | | OPTION 3 | 0000 0011 | 0000 0011 | | | | | | | | | | | | | | | | | | | |
| | 50Hz.VC | 0 | 0 | S12 | FACTORY SET | | | | | | | | | | | | | | | | | | | | | |
| | 50Hz.VS | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | HBL | 1 | 1 | <table border="1"> <thead> <tr> <th>항목</th> <th>NAME</th> <th>Address</th> <th>DATA</th> </tr> </thead> <tbody> <tr> <td rowspan="5">메모리</td> <td>SCREEN Bright</td> <td>6AE</td> <td>0A (hex)</td> </tr> <tr> <td>WARM_MIN</td> <td>6C7</td> <td>0C (hex)</td> </tr> <tr> <td>WARM_MAX</td> <td>6C8</td> <td>50 (hex)</td> </tr> <tr> <td>AGC_Start</td> <td>5F5~5F8</td> <td>19 (hex)</td> </tr> <tr> <td>AGC_Stop</td> <td>5F1~5F4</td> <td>1A (hex)</td> </tr> </tbody> </table> | | | | 항목 | NAME | Address | DATA | 메모리 | SCREEN Bright | 6AE | 0A (hex) | WARM_MIN | 6C7 | 0C (hex) | WARM_MAX | 6C8 | 50 (hex) | AGC_Start | 5F5~5F8 | 19 (hex) | AGC_Stop | 5F1~5F4 |
| 항목 | NAME | Address | DATA | | | | | | | | | | | | | | | | | | | | | | | |
| 메모리 | SCREEN Bright | 6AE | 0A (hex) | | | | | | | | | | | | | | | | | | | | | | | |
| | WARM_MIN | 6C7 | 0C (hex) | | | | | | | | | | | | | | | | | | | | | | | |
| | WARM_MAX | 6C8 | 50 (hex) | | | | | | | | | | | | | | | | | | | | | | | |
| | AGC_Start | 5F5~5F8 | 19 (hex) | | | | | | | | | | | | | | | | | | | | | | | |
| | AGC_Stop | 5F1~5F4 | 1A (hex) | | | | | | | | | | | | | | | | | | | | | | | |
| S7-1 | WBF | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | WBR | 10 | 10 | | | | | | | | | | | | | | | | | | | | | | | |
| | CFCLF | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | YD TV | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| | DTR | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | BPYD | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | TCI2X | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | PF | 3 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | TFR | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | NRR | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | WS | 3 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | BLS | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | DSK | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | AAS | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| | BSD | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | BKS | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | DSA | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | RPO | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| RPA | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| CFA0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | |

ALIGNMENT INSTRUCTION

2. ASSEMBLY ADJUSTMENTS

1) SCREEN ADJUSTMENT (S2)

- Enter the service mode and select service adjustment S2.
- You can see the one horizontal line on the screen.
- Adjust the Screen Control Volume (located on FBT) so that the horizontal line onscreen may be disappeared.
- Press S2 button to exit in the screen adjustment mode.

2) FOCUS ADJUSTMENT

- Turn in a local station and adjust the Focus Control knob (located on FBT) for best picture details at high light condition.

3) AGC ADJUSTMENT

- Adjust the antenna signal level at 60 dBuV
- Tune a colour bar pattern.
- Find the "AGC" item in service mode.
(it's two way to entering the "AGC" item in service mode)
 - Enter the service mode and select service adjustment S5 and select AUTO-AGC.
 - Enter the service mode and select service adjustment S3.
- Wait until AGC level stabilise to the optimum value.

- Alternatively,
Enter the service mode and select service adjustment S5 and select AGC LEVEL.
Use "Vol Up/Dwn" keys to adjust manually to the desired Tuner Take Over Point.

4) GEOMETRIC ADJUSTMENTS (S6)

- Select service adjustment S6
- You can see the OSD as shown in below.

| | | | |
|-------------|----|---------------|----|
| V.SLOPE | 25 | EW TRAPEZ | 28 |
| V.CENTER | 38 | CORNER TOP | 43 |
| V.SIZE | 44 | CORNER BOTTOM | 38 |
| H.CENTER | 47 | 50Hz. HC | 5 |
| H.SIZE | 51 | 50Hz.HS | 1 |
| V.LINEARITY | 34 | 50Hz.VC | 0 |
| S_CORRECT | 30 | 50Hz.VS | 0 |
| H.PARALLEL | 31 | HBL | 1 |
| H.BOW | 32 | WBF | 0 |
| PARABOLA | 36 | WBR | 10 |

▲ ▼ SELECT ◀ ▶ ADJUST ■ EXIT

4-2) Vertical Position Adjustment.

- Select V.SLOPE item, adjust V.SLOPE data value till the horizontal line in the centre of the video signal is just at the position where the blanking starts.
- Select V.CENTER item, adjust V.CENTER data value to center the raster properly on the screen.

4-3) Vertical Size Adjustment

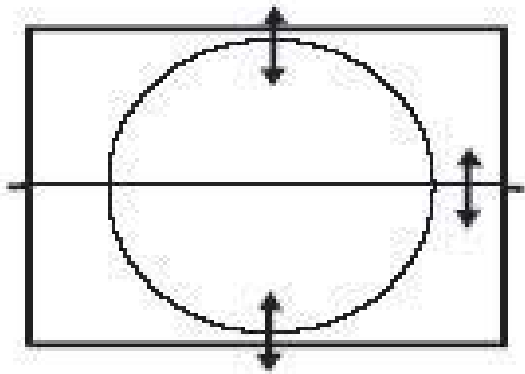
- Select V.SIZE item, adjust V.SIZE data value to proper vertical size as follows.

4-4) Horizontal Position Adjustment

- Select H.CENTER item, adjust H.CENTER data value to obtain proper horizontal centering of the internal cross pattern at the left and right of the screen.

4-5) Horizontal Size adjustment

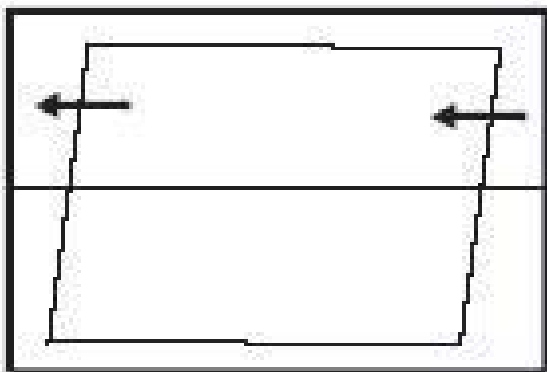
- Select H.SIZE item, adjust H.SIZE value to proper horizontal size.



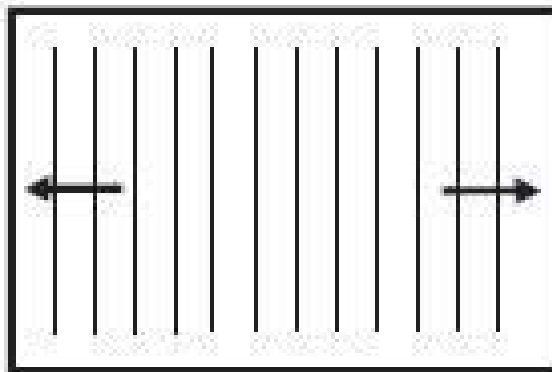
ALIGNMENT INSTRUCTION

4-4). EAST / WEST Adjustment

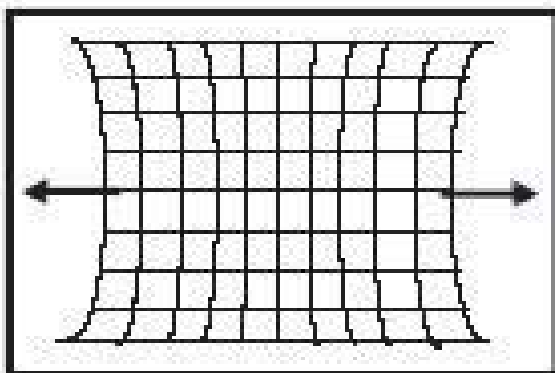
- Adjust the H.PARALLEL, H.SIZE, H-BOW, PARABOLA, EW TRAPEZ, CORNER TOP, CORNER BOTTOM to compensate for geometrical distortion.



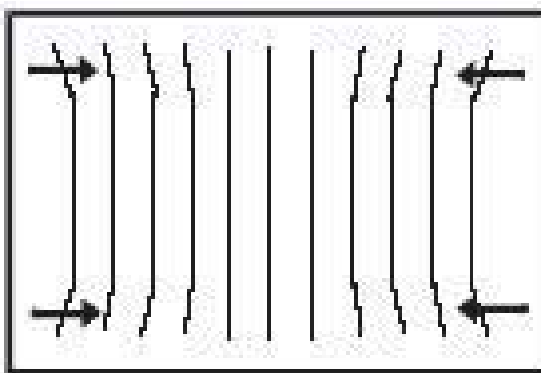
H.PARALLEL



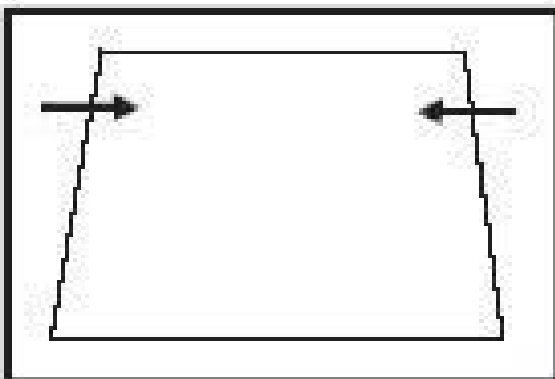
H.SIZE



PARABOLA



CORNER TOP, CORNER BOTTOM



EW TRAPEZ

5) WHITE BALANCE ADJUSTMENT(S8)

- Receive a good local channel.
- Enter the service mode and select service adjustment S8.
- You can see the OSD as shown in below.

| | | | |
|--------|----|------------|----|
| R-GAIN | 32 | SRC R-BIAS | 0 |
| G-GAIN | 32 | SRC G-BIAS | 0 |
| B-GAIN | 40 | CVI R-BIAS | 0 |
| R-BIAS | 32 | CVI G-BIAS | +8 |
| G-BIAS | 32 | | |

▲▼ SELECT ◀▶ ADJUST ■ EXIT

- Using volume up or volume down, adjust service adjustment data of R-GAIN/G-GAIN/B-GAIN and R-BIAS/G-BIAS until a good gray scale with normal whites is obtained.

6) DIGITAL PRESET(D.P) ADJUSTMENTS(S9)

SUBBRIGHTNESS ADJUSTMENT

- Receive a good local channel.
- Enter the service mode and select service adjustment S9.
- You can see the OSD as shown in below.

| | |
|----------------|----|
| DP-Brightness: | 17 |
| DP-Contrast | 17 |
| DP-Color | 4 |
| DP-Sharpnes: | 17 |

▲▼ SELECT ◀▶ ADJUST ■ EXIT

- Select DP-Brightness item, adjust DP-Brightness data value to obtain normal brightness level.

DP-Contrast

- Fixed value = 10

DP-Color

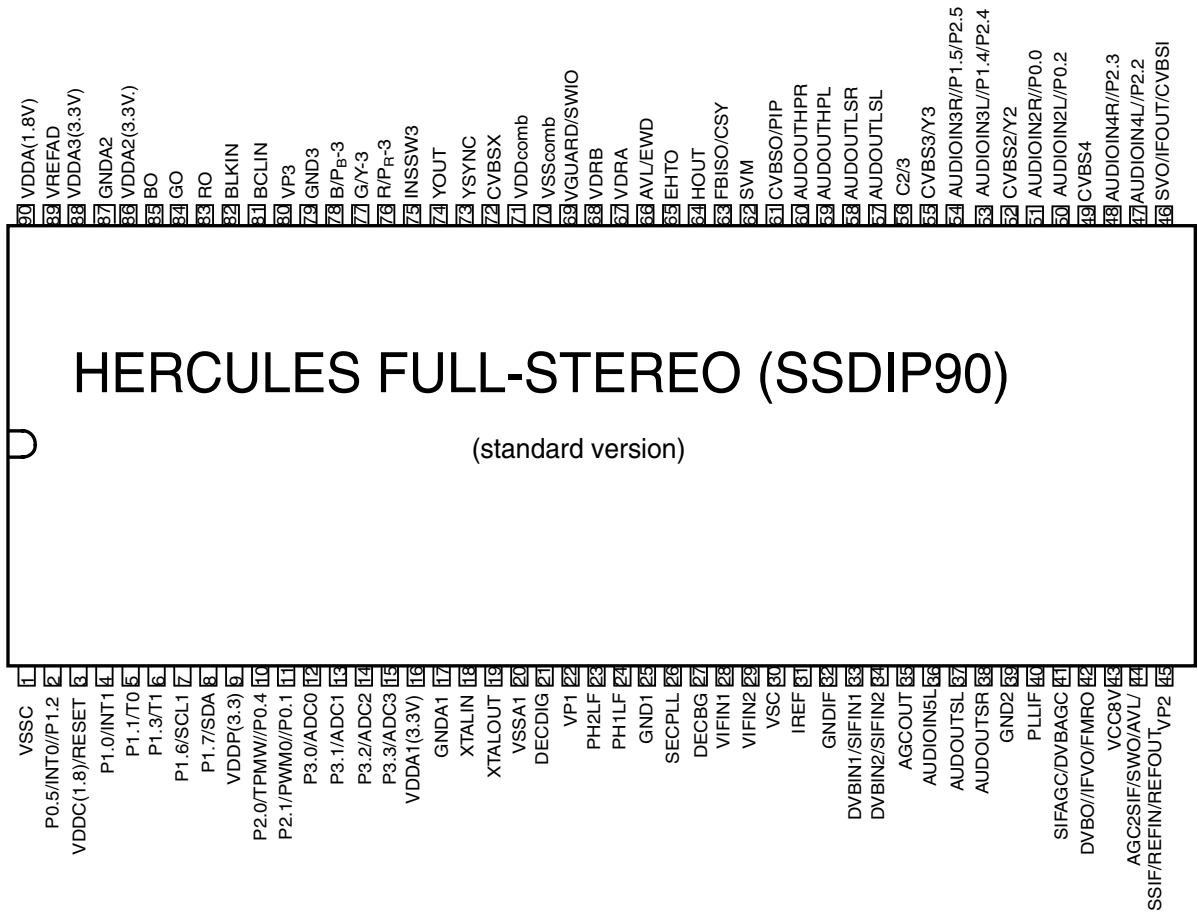
- Fixed value = 5

DP-Sharpness

- Fixed value = 17

7) FACTORY OUTGOING MODE (S12 : FACT)

- If you select the S12, then the set becomes factory outgoing status.
- You can see the OSD "SHIPPING OFF"



IC DESCRIPTION

| SYMBOL | STANDARD VERSION | DESCRIPTION |
|------------------------|--|--|
| | MONO+AV STEREO SSDIP90 FULL-STEREO/ | |
| VSSP2 | 1 | ground |
| VSSC4 | 1 | ground |
| VDDC4 | 3 | digital supply to SDACs (1.8V) |
| VDDA3(3.3V) | 16 | supply (3.3 V) |
| VREF_POS_LSL | 16 | positive reference voltage SDAC (3.3 V) |
| VREF_NEG_LSL+HPL | 17 | negative reference voltage SDAC (0 V) |
| VREF_POS_LSR+HPR | 16 | positive reference voltage SDAC (3.3 V) |
| VREF_NEG_HPL+HPR | 17 | negative reference voltage SDAC (0 V) |
| VREF_POS_HPR | 16 | positive reference voltage SDAC (3.3 V) |
| XTALIN | 18 | crystal oscillator input |
| XTALOUT | 19 | crystal oscillator output |
| VSSA1 | 20 | ground |
| VGUARD/SWIO | 69 | V-guard input / I/O switch (e.g. 4 mA current sinking capability for direct drive of LEDs) |
| DECDIG | 21 | decoupling digital supply |
| VP1 | 22 | 1 st supply voltage TV-processor (+5 V) |
| PH2LF | 23 | phase-2 lter |
| PH1LF | 24 | phase-1 lter |
| GND1 | 25 | ground 1 for TV-processor |
| SECPLL | 26 | SECAM PLL decoupling |
| DECBG | 27 | bandgap decoupling |
| EWD/AVL ⁽¹⁾ | 66 | East-West drive output or AVL capacitor |
| VDRB | 68 | vertical drive B output |
| VDRA | 67 | vertical drive A output |
| VIFIN1 | 28 | IF input 1 |

| SYMBOL | STANDARD VERSION | DESCRIPTION |
|--|---|---|
| | MONO+AV STEREO SS DIP90 FULL-STEREO/ | |
| VIFIN2 | 29 | IF input 2 |
| VSC | 30 | vertical sawtooth capacitor |
| IREF | 31 | reference current input |
| GNDIF | 32 | ground connection for IF amplifier |
| SIFIN1/DVBIN1 ⁽²⁾ | 33 | SIF input 1 / DVB input 1 |
| SIFIN2/DVBIN2 ⁽²⁾ | 34 | SIF input 2 / DVB input 2 |
| AGCOUT | 35 | tuner AGC output |
| EHTO | 65 | EHT/overvoltage protection input |
| AVL/SWO/SSIF/ REFO/REFIN ⁽²⁾ | 44 | Automatic Volume Levelling / switch output / sound IF input / subcarrier reference output / external reference signal input for I signal mixer for DVB operation |
| AUDIOIN5 | - | audio 5 input |
| AUDIOIN5L | 36/- | audio-5 input (left signal) |
| AUDIOIN5R | - | audio-5 input (right signal) |
| AUDOUTSL | 37 | audio output for SCART/CINCH (left signal) |
| AUDOUTSR | 38 | audio output for SCART/CINCH (right signal) |
| DECSDEM | -/72 | decoupling sound demodulator |
| QSSO/AMOUT/AUDEEM ⁽²⁾ | -/36 | QSS intercarrier output / AM output / deemphasis (front-end audio out) |
| GND2 | 39 | ground 2 for TV processor |
| PLLIF | 40 | IF-PLL loop filter |
| SIFAGC/DVBAGC ⁽²⁾ | 41 | AGC sound IF / internal-external AGC for DVB applications |
| DVBO/IFVO/FMRO ⁽²⁾ | 42 | Digital Video Broadcast output / IF video output / FM radio output |
| DVBO/FMRO ⁽²⁾ | - | Digital Video Broadcast output / FM radio output |
| VCC8V | 43 | 8 Volt supply for audio switches |

IC DESCRIPTION

| SYMBOL | STANDARD VERSION | DESCRIPTION |
|-------------------------------|--|---|
| | MONO+AV STEREO SDDIP90 FULL-STEREO/ | |
| AGC2SIF | 44/- | AGC capacitor second sound IF |
| VP2 | 45 | 2 nd supply voltage TV processor (+5 V) |
| IFVO/SVO/CVBSI ⁽²⁾ | 46 | IF video output / selected CVBS output / CVBS input |
| AUDIOIN4 | - | audio 4 input |
| AUDIOIN4L | 47 | audio-4 input (left signal) |
| AUDIOIN4R | 48 | audio-4 input (right signal) |
| CVBS4/Y4 | 49 | CVBS4/Y4 input |
| C4 | - | chroma-4 input |
| AUDIOIN2 | - | audio 2 input |
| AUDIOIN2L | 50 | audio 2 input (left signal) |
| AUDIOIN2R | 51 | audio 2 input (right signal) |
| CVBS2/Y2 | 52 | CVBS2/Y2 input |
| AUDIOIN3 | | audio 3 input |
| AUDIOIN3L | 53 | audio 3 input (left signal) |
| AUDIOIN3R | 54 | audio 3 input (right signal) |
| CVBS3/Y3 | 55 | CVBS3/Y3 input |
| C2/C3 | 56 | chroma-2/3 input |
| AUDOUTLSL | 57 | audio output for audio power amplifier (left signal) |
| AUDOUTLSR | 58 | audio output for audio power amplifier (right signal) |
| AUDOUT/AMOUT/FMOUT | - | audio output / AM output / FM output, volume controlled |
| AUDOUTHPL | 59 | audio output for headphone channel (left signal) |
| AUDOUTHPR | 60 | audio output for headphone channel (right signal) |
| CVBSO/PIP | 61 | CVBS / PIP output |

| SYMBOL | STANDARD VERSION | DESCRIPTION |
|--|--|--|
| | MONO+AV/STEREO SSD/PP90 FULL-STEREO/ | |
| SVM | 62 | scan velocity modulation output |
| FBISO/CSY | 63 | Y-back input/sandcastle output or composite H/V timing output |
| HOUT | 64 | horizontal output |
| VSScomb | 70 | ground connection for comb filter |
| VDDcomb | 71 | supply voltage for comb filter (5 V) |
| VIN (R/P _R IN2/C _X) | - | V-input for YUV interface (2 nd R input / P _R input or C _X input) |
| UIN (B/P _B IN2) | - | U-input for YUV interface (2 nd B input / P _B input) |
| YIN (G/YIN2/CVBS-Y _X) | 72/- | Y-input for YUV interface (2 nd G input / Y input or CVBS/Y _X input) |
| YSYNC | 73 | Y-input for sync separator |
| YOUT | 74 | Y-output (for YUV interface) |
| UOUT (INSSW2) | - | U-output for YUV interface (2 nd RGB / YP _B P _R insertion input) |
| VOUT (SWO1) | - | V-output for YUV interface (general purpose switch output) |
| INSSW3 | 75 | 3 rd RGB / YP _B P _R insertion input |
| R/P _R IN3 | 76 | 3 rd R input / P _R input |
| G/YIN3 | 77 | 3 rd G input / Y input |
| B/P _B IN3 | 78 | 3 rd B input / P _B input |
| GND3 | 79 | ground 3 for TV-processor |
| VP3 | 80 | 3 rd supply for TV processor |
| BCLIN | 81 | beam current limiter input |
| BLKIN | 82 | black current input |
| RO | 83 | Red output |
| GO | 84 | Green output |
| BO | 85 | Blue output |

IC DESCRIPTION

| SYMBOL | STANDARD VERSION | DESCRIPTION |
|---------------|--|---|
| | MONO+ AV STEREO SSDIP90 FULL-STEREO/ MONO+ AV STEREO SSDIP90 | |
| VDDA1 | 86 | analog supply for TCG mController and digital supply for TV-processor (+3.3 V) |
| VREFAD_NEG | 87 | negative reference voltage (0 V) |
| VREFAD_POS | 88 | positive reference voltage (3.3 V) |
| VREFAD | 89 | reference voltage for audio ADCs (3.3/2 V) |
| GNDA | 87 | ground |
| VDDA(1.8V) | 90 | analogue supply for audio ADCs (1.8 V) |
| VDDA2(3.3) | 88 | supply voltage SDAC (3.3 V) |
| VSSadc | 1 | ground for on-chip temperature sensor |
| VDDadc(1.8) | 90 | supply voltage video ADC |
| INT0/P0.5 | 2 | external interrupt 0 or port 0.5 (4 mA current sinking capability for direct drive of LEDs) |
| P1.0/INT1 | 4 | port 1.0 or external interrupt 1 |
| P1.1/T0 | 5 | port 1.1 or Counter/Timer 0 input |
| VDDC2 | 3 | digital supply to core (1.8 V) |
| VSSC2 | 1 | ground |
| P0.4/I2SWS | - | port 0.4 or I ² S word select |
| P0.4 | - | port 0.4 |
| P0.3/I2SCLK | - | port 0.3 or I ² S clock |
| P0.3 | - | port 0.3 |
| P0.2/I2SDO2 | 50 | port 0.2 or I ² S digital output 2 |
| P0.2 | - | port 0.2 |
| P0.1/I2SDO1 | - | port 0.1 or I ² S digital output 1 |
| P0.1 | - | port 0.1 |
| P0.0/I2SDI1/O | 51 | port 0.0 or I ² S digital input 1 or I ² S digital output |
| P0.0 | - | port 0.0 |
| P1.3/T1 | 6 | port 1.3 or Counter/Timer 1 input |

| SYMBOL | STANDARD VERSION | DESCRIPTION |
|------------|---|---|
| | MONO+AV STEREO SSSDIP90 FULL-STEREO/ | |
| P1.6/SCL | 7 | port 1.6 or I ² C-bus clock line |
| P1.7/SDA | 8 | port 1.7 or I ² C-bus data line |
| VDDP(3.3V) | 9 | supply to periphery and on-chip voltage regulator (3.3 V) |
| P2.0/TPWM | 10 | port 2.0 or Tuning PWM output |
| P2.1/PWM0 | 11 | port 2.1 or PWM0 output |
| P2.2/PWM1 | 47 | port 2.2 or PWM1 output |
| P2.3/PWM2 | 48 | port 2.3 or PWM2 output |
| P3.0/ADC0 | 12 | port 3.0 or ADC0 input |
| P3.1/ADC1 | 13 | port 3.1 or ADC1 input |
| VDDC1 | 3 | digital supply to core (+1.8 V) |
| DECV1V8 | 3 | decoupling 1.8 V supply |
| P3.2/ADC2 | 14 | port 3.2 or ADC2 input |
| P3.3/ADC3 | 15 | port 3.3 or ADC3 input |
| VSSC/P | 1 | digital ground for m-Controller core and periphery |
| P2.4/PWM3 | 53 | port 2.4 or PWM3 output |
| P2.5/PWM4 | 54 | port 2.5 or PWM4 output |
| VDDC3 | 3 | digital supply to core (1.8V) |
| VSSC3 | 1 | ground |
| P1.2/INT2 | 2 | port 1.2 or external interrupt 2 |
| P1.4/RX | 53 | port 1.4 or UART bus |
| P1.5/TX | 54 | port 1.5 or UART bus |

IC DESCRIPTION

2. TDA8358J VERTICAL AMPLIFIER

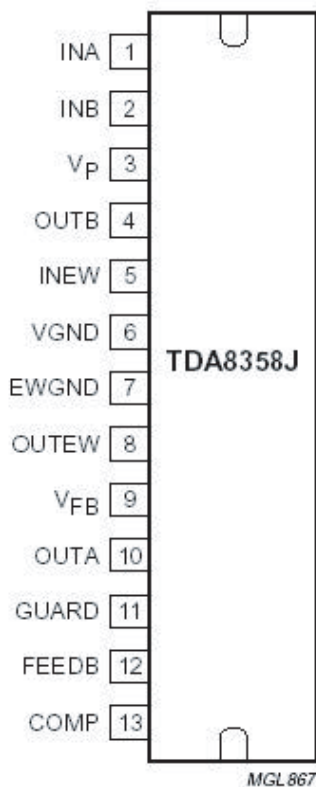
The TDA8358J are power circuit for use in 90° and 110° colour deflection systems for field frequencies of 25 to 200Hz field frequencies, and for 4:3 and 16/9 picture tubes. The IC contains a vertical deflection output circuit, operating as a high efficiency class G system. The full bridge output circuit allows DC coupling of the deflection coil in combination with single positive supply voltages.

The east-west output stage is able to supply the sink current for a diode modulator circuit.

The IC is constructed in a Low Voltage DMOS(LVDMOS) process that combines bipolar, CMOS and DMOS devices. DMOS transistors are used in the output stage because of the absence of second breakdown.

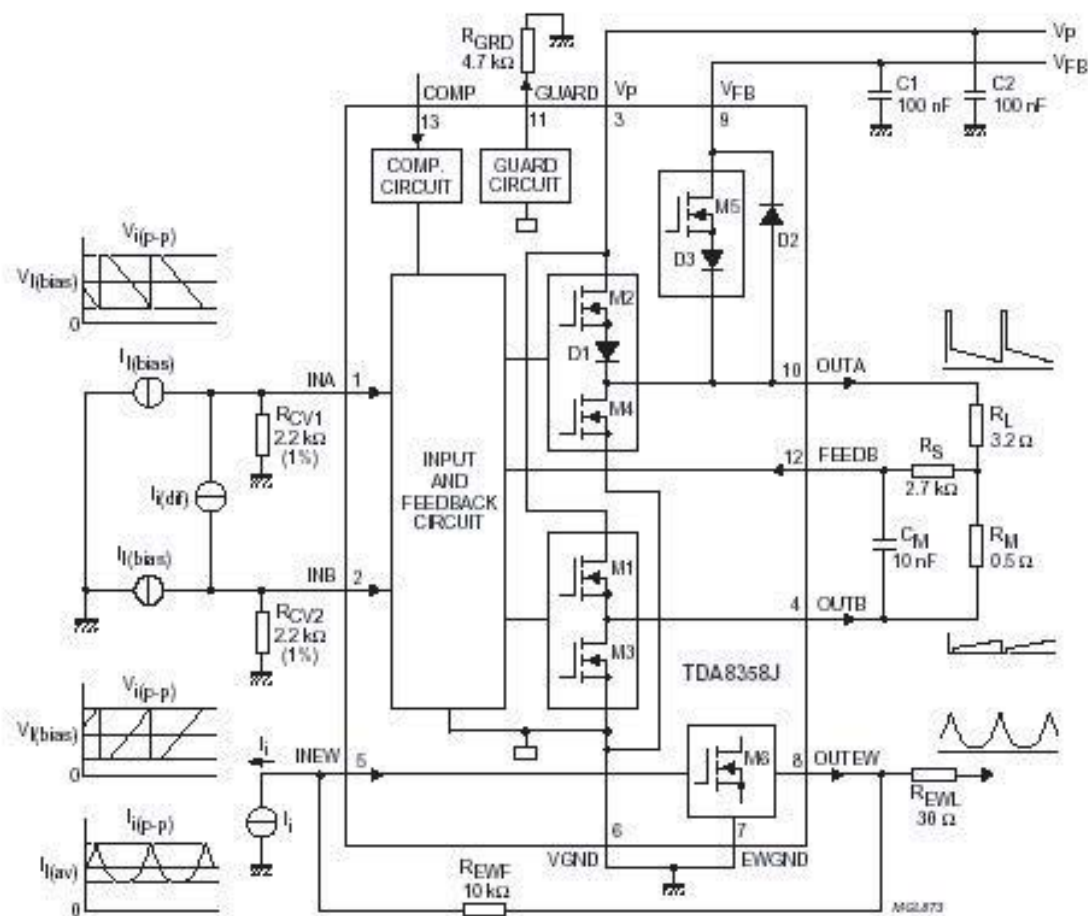
Features :

- Few external components
- Highly efficient fully DC-coupled vertical bridge output circuit
- Vertical flyback switch with short rise and fal times
- Built-in guard circuit
- Thermal protection circuit
- Improved EMC performance due to differential inputs
- East-west output stage



Pinning

| Pin | Symbol | Description |
|-----|-----------------|----------------------------|
| 1 | INA | Positive vertical input |
| 2 | INB | Negative vertical input |
| 3 | V _P | Supply voltage |
| 4 | OUTB | Vertical output voltage B |
| 5 | INEW | East-west input voltage |
| 6 | VGND | Vertical ground |
| 7 | EWGND | East-west ground |
| 8 | OUTEW | East-west output voltage |
| 9 | V _{FB} | Flyback supply voltage |
| 10 | OUTA | Vertical output voltage A |
| 11 | GUARD | Guard output voltage |
| 12 | FEEDB | Input measuring resistor |
| 13 | COMP | Input compensation current |



Block diagram TDA8358J

IC DESCRIPTION

3. TDA6107AJF

The TDA6107AJF includes three video output amplifiers and is intended to drive the three cathodes of a colour CRT directly. The device is contained in a plastic DIL-bent-SIL 9-pin medium power(DBS9MPF) package, and uses high-voltage DMOS technology.

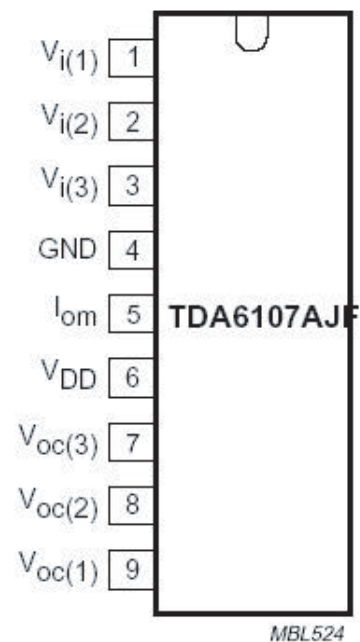
To obtain maximum performance, the amplifier should be used with black-current control.

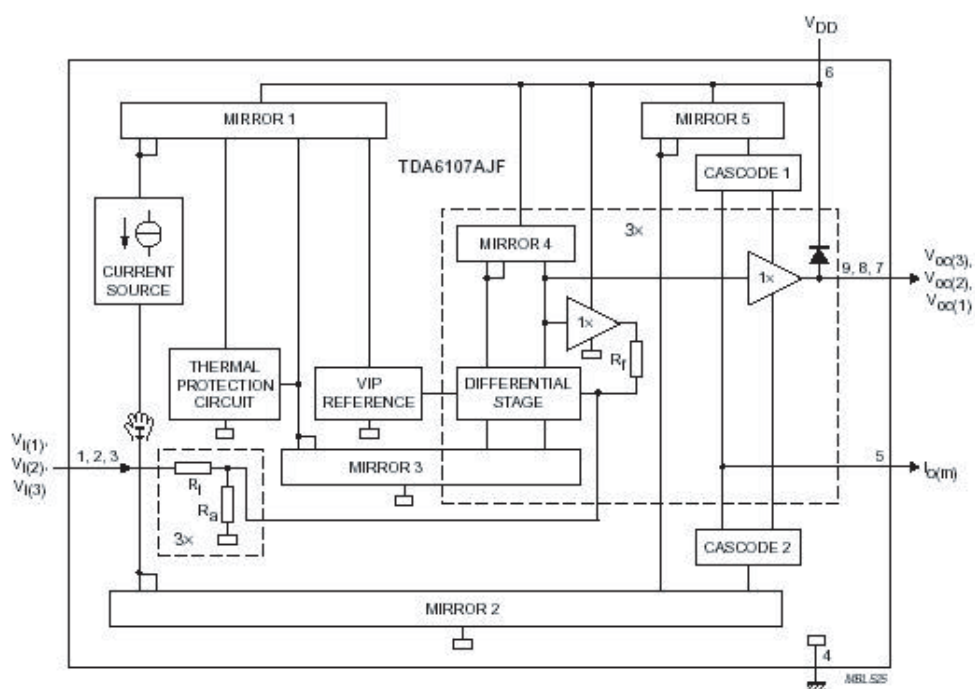
Features

- Typical bandwidth of 5.5 MHz for an output signal of 60 Vpp
- High slew rate of 900V/µs
- No external components required
- Very simple application
- Single supply voltage of 200V
- Internal reference voltage of 2.5 V
- Fixed gain of 81.
- Black-current stabilisation (BCS) circuit with voltage window from 1.8 to 6 V and current window from 100µA to -10mA
- Thermal protection
- Internal protection against positive flashover discharges appearing on the CRT

Pin description

| Pin | Symbol | Description |
|-----|-------------|----------------------------------|
| 1 | $V_{i(1)}$ | inverting input 1 |
| 2 | $V_{i(2)}$ | inverting input 2 |
| 3 | $V_{i(3)}$ | inverting input 3 |
| 4 | GND | ground (fin) |
| 5 | I_{om} | black current measurement output |
| 6 | V_{DD} | supply voltage |
| 7 | $V_{OC(3)}$ | cathode output 3 |
| 8 | $V_{OC(2)}$ | cathode output 2 |
| 9 | $V_{OC(1)}$ | cathode output 1 |





Block diagram TDA6107AJF

4. 24WC16 - 16 KB EEPROM

Features :

- 16 Kbit serial I2C bus EEPROM
- 400KHz I2C Bus Compatible
- supply voltage : 1.8 V to 6.0 V
- Low Power CMOS Technology
- 1 Million Erase/Write cycles (minimum)
- 100 year data retention (minimum)

Pin description

| Pin No. | Name | Description |
|---------|------------|----------------------------------|
| 1, 2, 3 | A0, A1, A2 | Device address – not used |
| 5 | SDA | Serial Data/Address Input/Output |
| 6 | SCL | Serial clock |
| 7 | WP | Write control |
| 8 | Vcc | Supply voltage |
| 4 | Vss | Ground |

The memory device is compatible with the I2C memory standard. This is a two wire serial interface that uses a bi-directional data bus and serial clock. The memory carries a built-in 4-bit unique device type identifier code (1010) in accordance with the I2C bus definition.

Serial Clock (SCL)

The SCL input is used to strobe all data in and out of the memory.

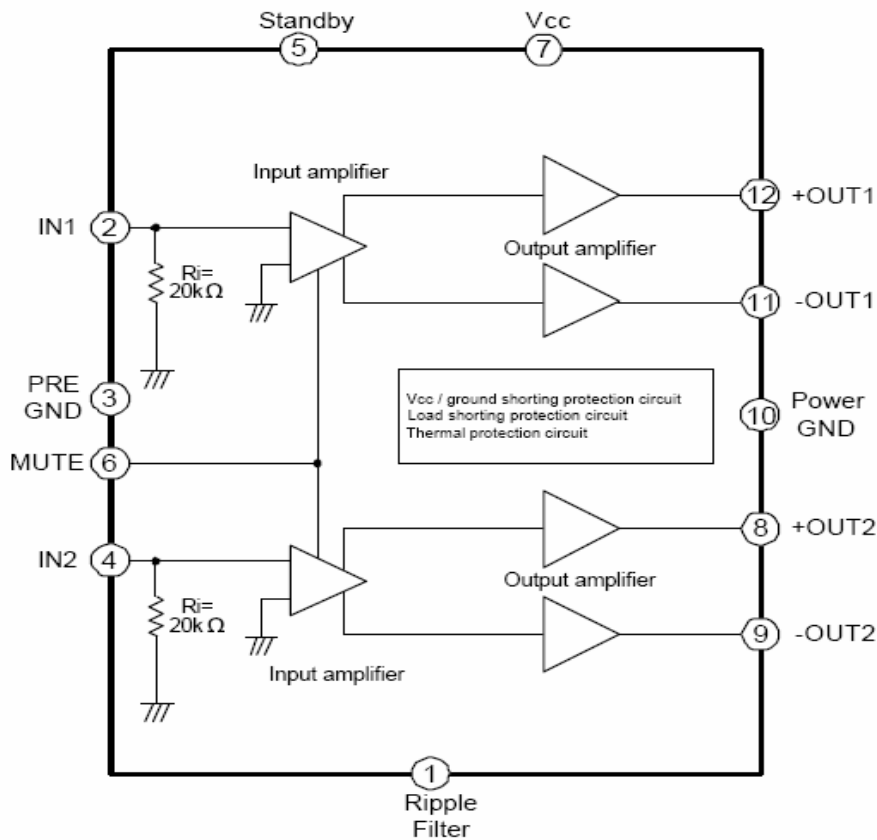
Serial Data (SDA)

The SDA pin is bi-directional, and is used to transfer data in or out of the memory.

5. LA42072N-E AUDIO AMPLIFIER

LA42000 series is power IC which made Pin compatible possible a ltogether in 5 to 15W. They consist of four kinds of power ICs. (mono, stereo, mono with volume function , stereo with volume function.) They realized PCB layout communalization of an audio power block of TV.

Block Diagram



Operating Characteristics at $T_a = 25^\circ\text{C}$, $V_{CC} = 12\text{V}$, $R_L = 8\ \Omega$, $f = 1\text{kHz}$ $z, R_g = 600\ \Omega$

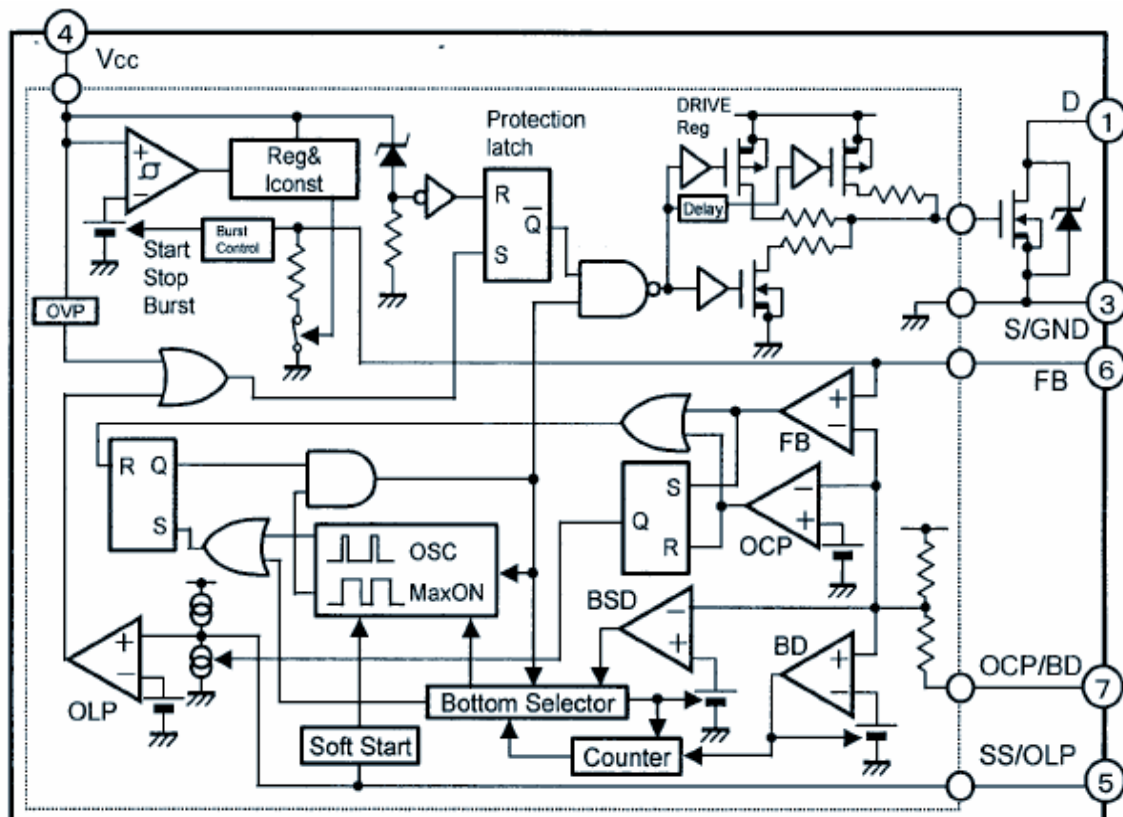
| Parameter | Symbol | Conditions | Ratings | | | Unit |
|--|--------------|--|---------|------|-----|--------------------|
| | | | min | typ | max | |
| Quiescent current | I_{CCO} | $R_g=0$ | 40 | 70 | 150 | mA |
| Output power | P_o | THD=10% | 6 | 7 | - | W |
| Total harmonic distortion | THD | $P_o=1\text{W}$ | - | 0.06 | 0.2 | % |
| Voltage gain | VG | $V_o=0\text{dBm}$ | 33 | 35 | 37 | dB |
| Output noise voltage | V_{NO} | $R_g=0, \text{BPF}=20\text{Hz to } 20\text{kHz}$ | - | 0.1 | 0.3 | mVrms |
| Ripple rejection | SVRR | $R_g=0, f_r=100\text{Hz}, V_{CCR}=0\text{dBm}$ | 50 | 60 | - | dB |
| Channel separation | Sep. | $R_g=10\text{k}\ \Omega, V_o=0\text{dBm}$ | 50 | 60 | - | dB |
| Muting attenuation | A_{TT} | $V_o=1\text{Vrms}, \text{BPF}=20\text{Hz to } 20\text{kH}$ | 80 | 90 | - | dB |
| Muting control voltage (The Pin 6 voltage) | V_{MUTE-H} | Muting on | 1.7 | - | 3.0 | V |
| | V_{MUTE-L} | Muting off | 0 | - | 0.5 | V |
| Standby control voltage (The Pin 5 voltage) | V_{STB-H} | Amplifier on | 2.5 | - | 20 | V |
| | V_{STB-L} | Amplifier off | 0 | - | 0.5 | V |
| Input resistance | R_i | | 21 | 30 | 39 | $\text{k}\ \Omega$ |

6. STR-W6756

FUNCTIONS OF EACH TERMINAL

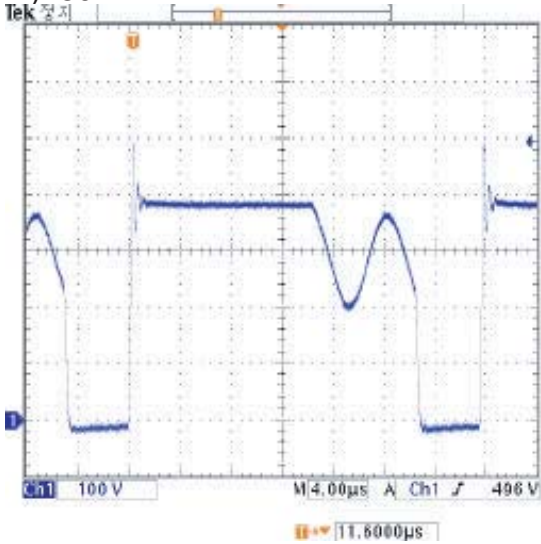
| TERMINAL No. | SYMBOLS | DESCRIPTIONS | FUNCTIONS |
|--------------|---------|--|--|
| 1 | D | DRAIN TERMINAL | MOSFET DRAIN |
| 3 | S/GND | SOURCE/GND | MOSFET SOURCE / GND |
| 4 | Vcc | SET UP TERMINAL | INPUT OF POWER SUPPLY FOR CONTROL CIRCUIT |
| 5 | SS/OLP | DELAY AT OVERLOAD / SOFT START SET UP TERMINAL | OVERLOAD PROTECTION AND SOFT START OPERATION TIME SET UP |
| 6 | FB | FEEDBACK TERMINAL | CONSTANT VOLTAGE CONTROL SIGNAL INPUT, BURST (INTERMITTENT) MODE OSCILLATION |
| 7 | OCP/BD | OVERCURRENT PROTECTION INPUT / BOTTOM DETECTION TERMINAL | OVERCURRENT DETECTION SIGNAL INPUT / BOTTOM DETECTION SIGNAL INPUT |

BLOCK DIAGRAM

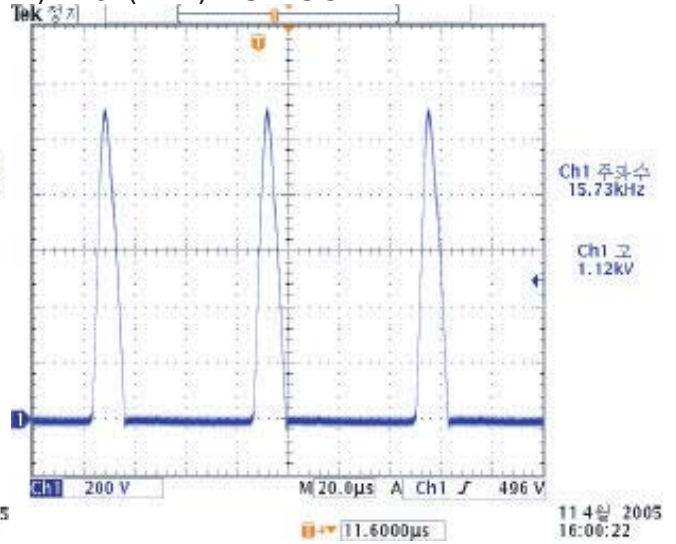


WAVEFORMS

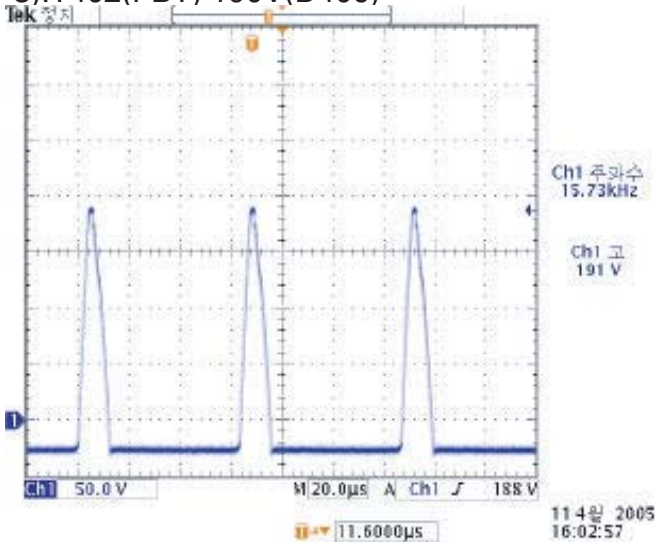
1).I801 PIN1



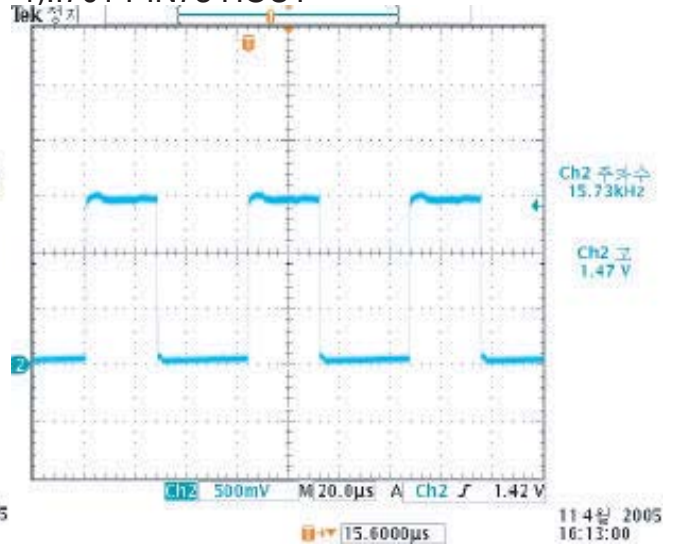
2).T402(FBT) HOR.OUT



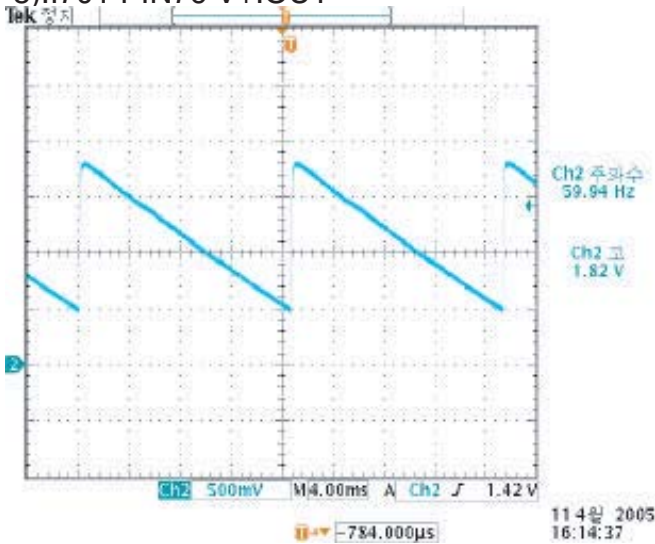
3).T402(FBT) 190V(D406)



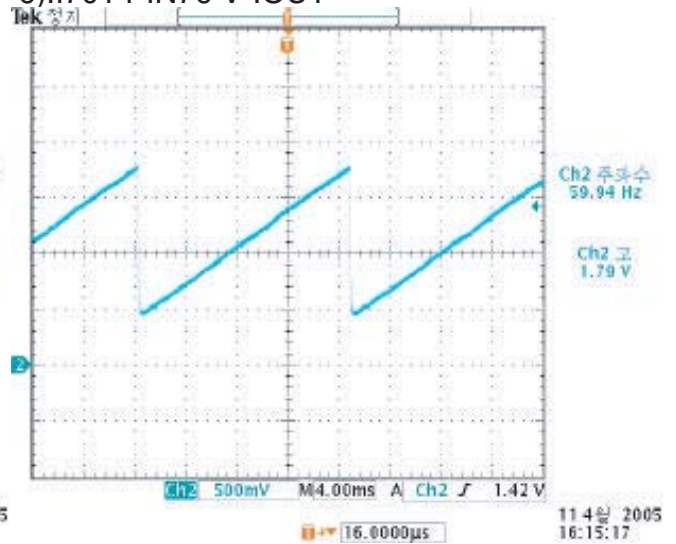
4).I701 PIN73 HOUT



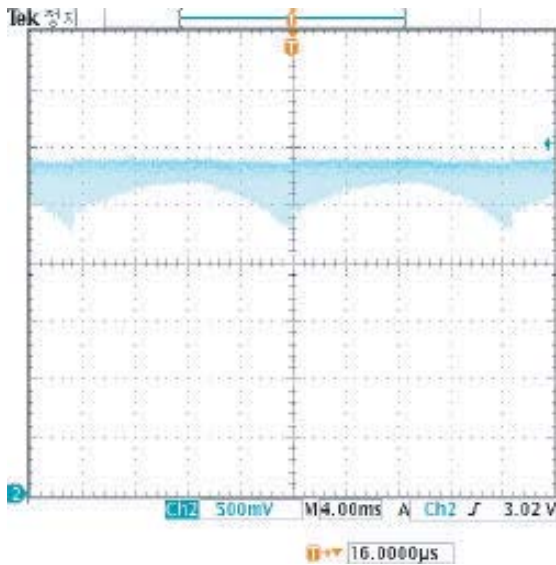
5).I701 PIN76 V+.OUT



6).I701 PIN76 V-.OUT

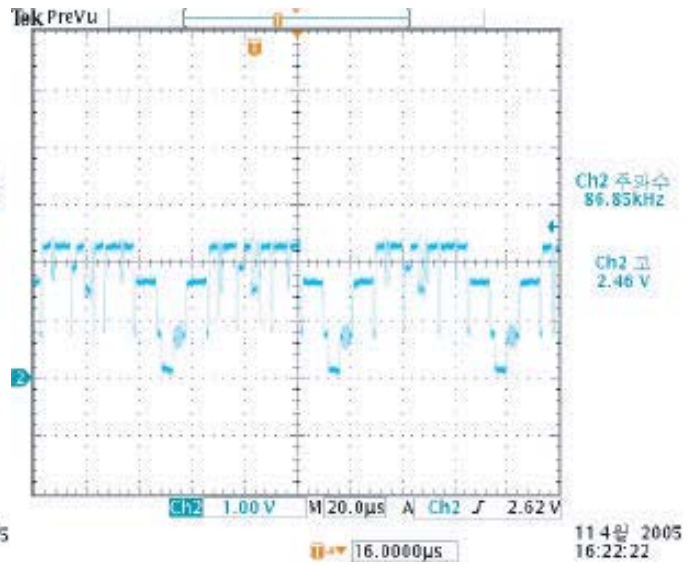


7).I701 PIN75 EW OUT



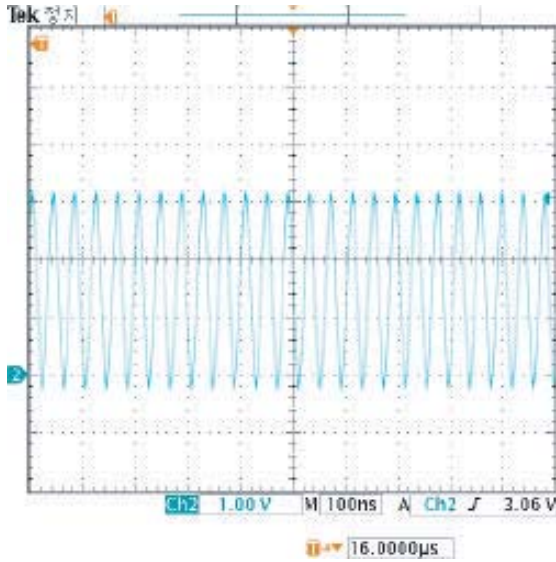
11 4월 2005 16:17:15

8).I701 PIN46 MONITOR OUT



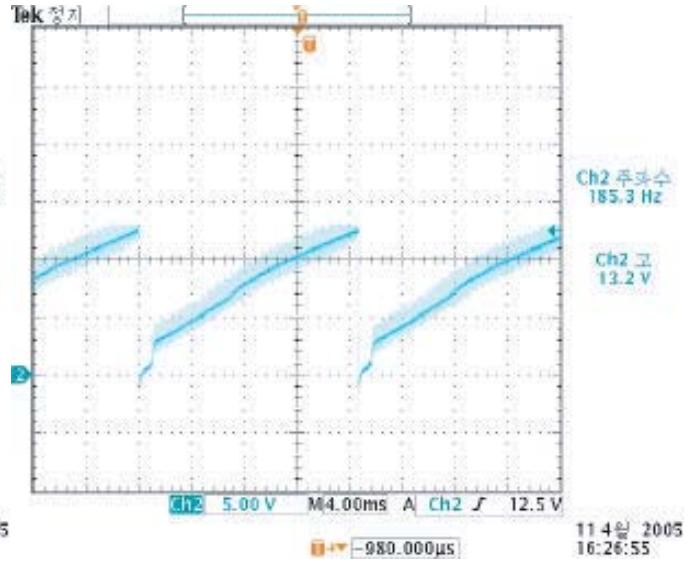
11 4월 2005 16:22:22

9).I701 (X-TAL)



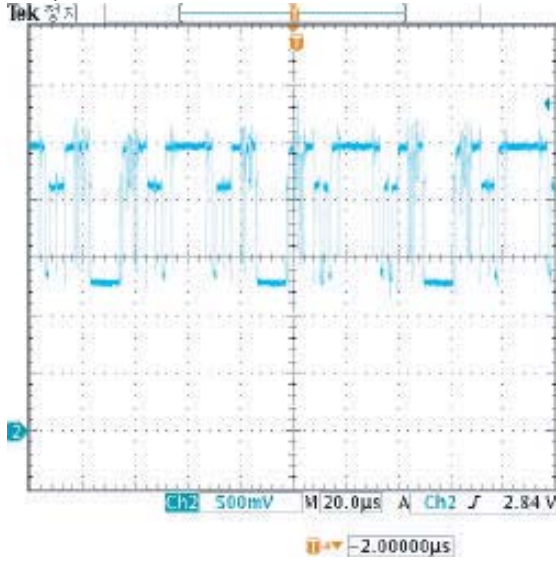
11 4월 2005 16:23:57

10).I301 PIN4 V.OUT



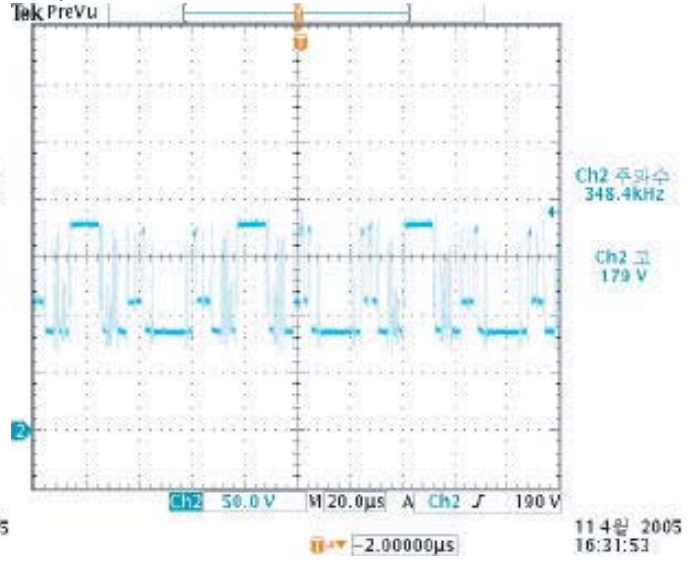
11 4월 2005 16:26:55

11).I901 PIN R.IN



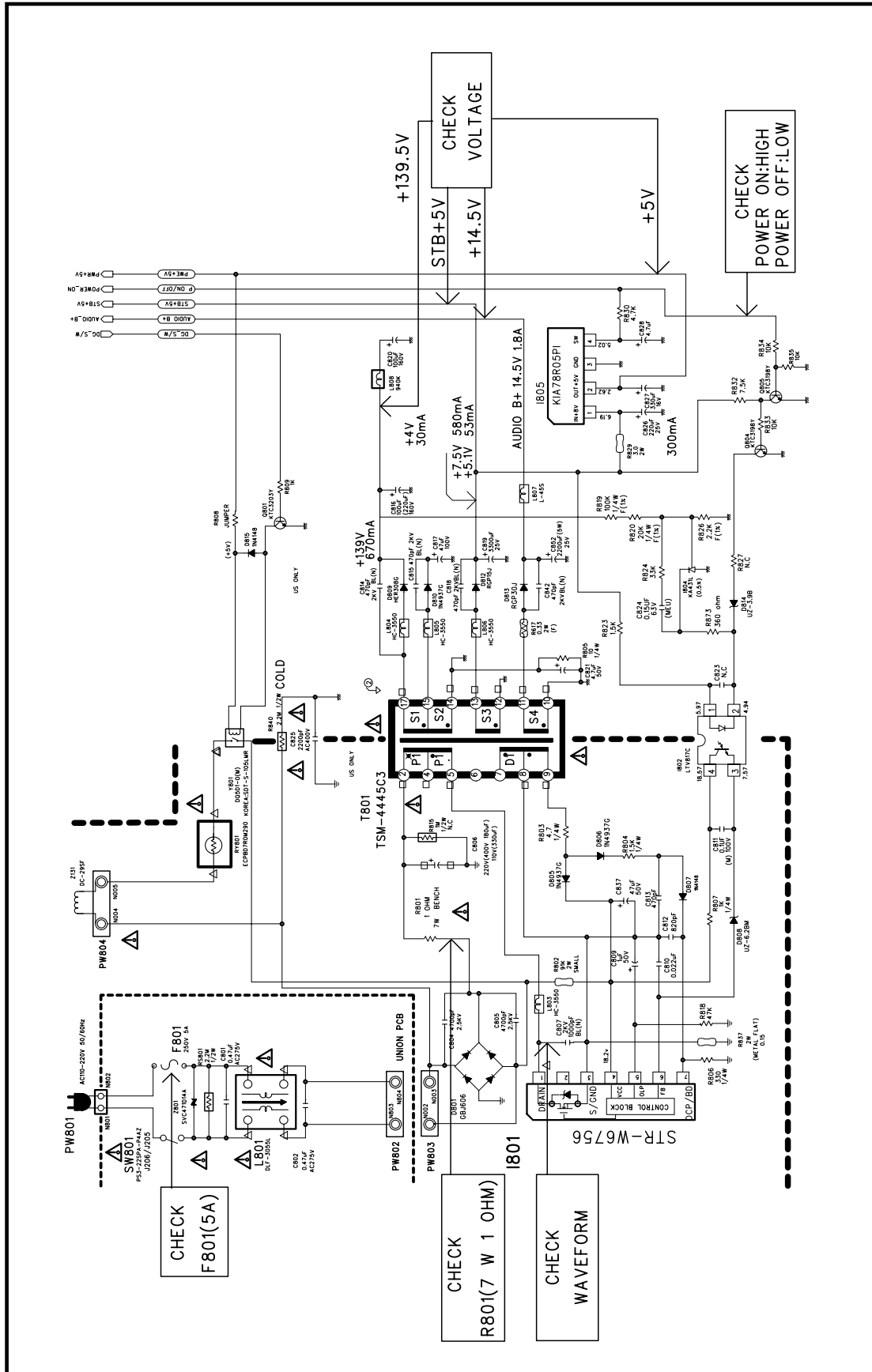
11 4월 2005 16:33:19

12).I901 PIN R.OUT



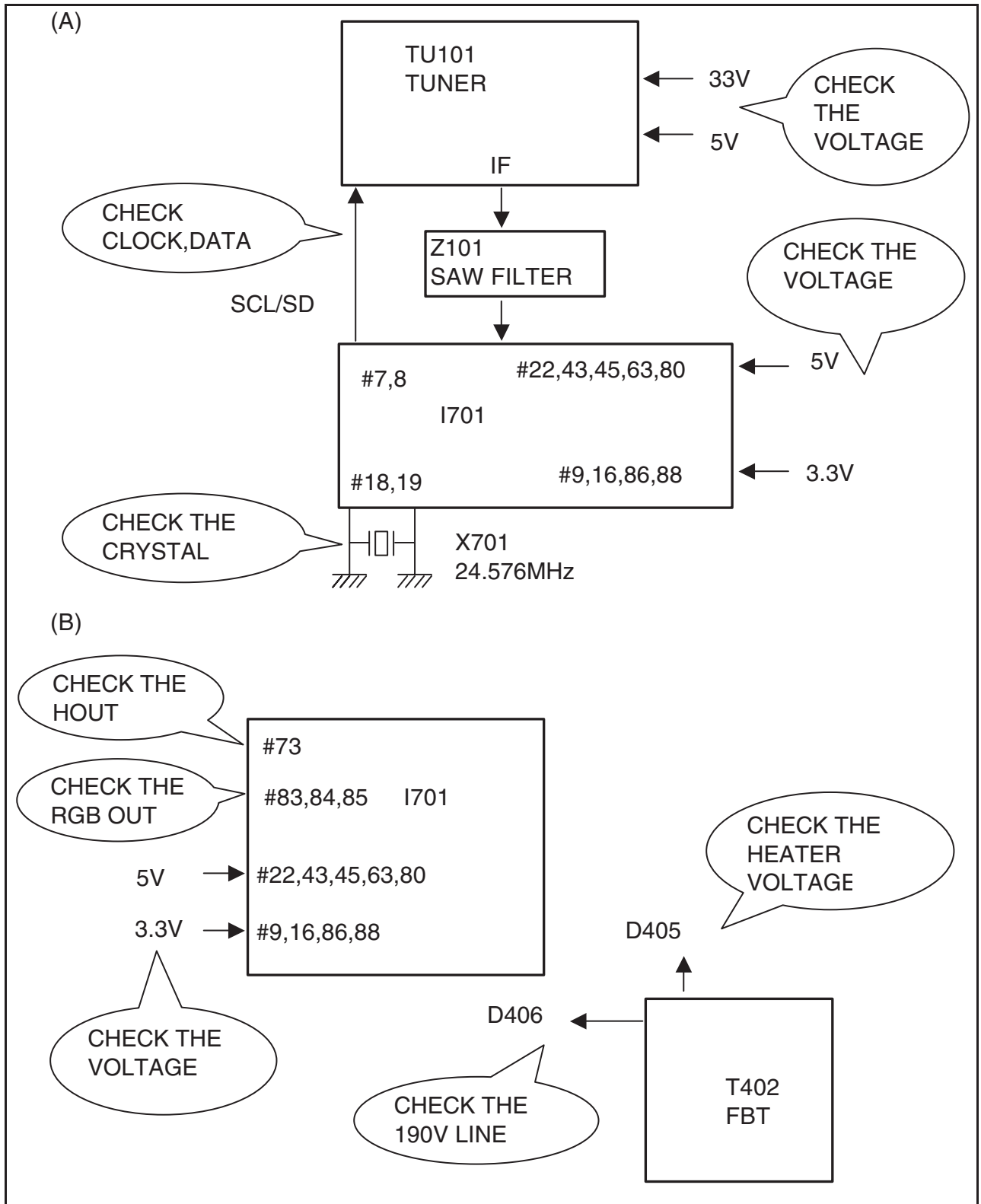
11 4월 2005 16:31:53

1. NO POWER



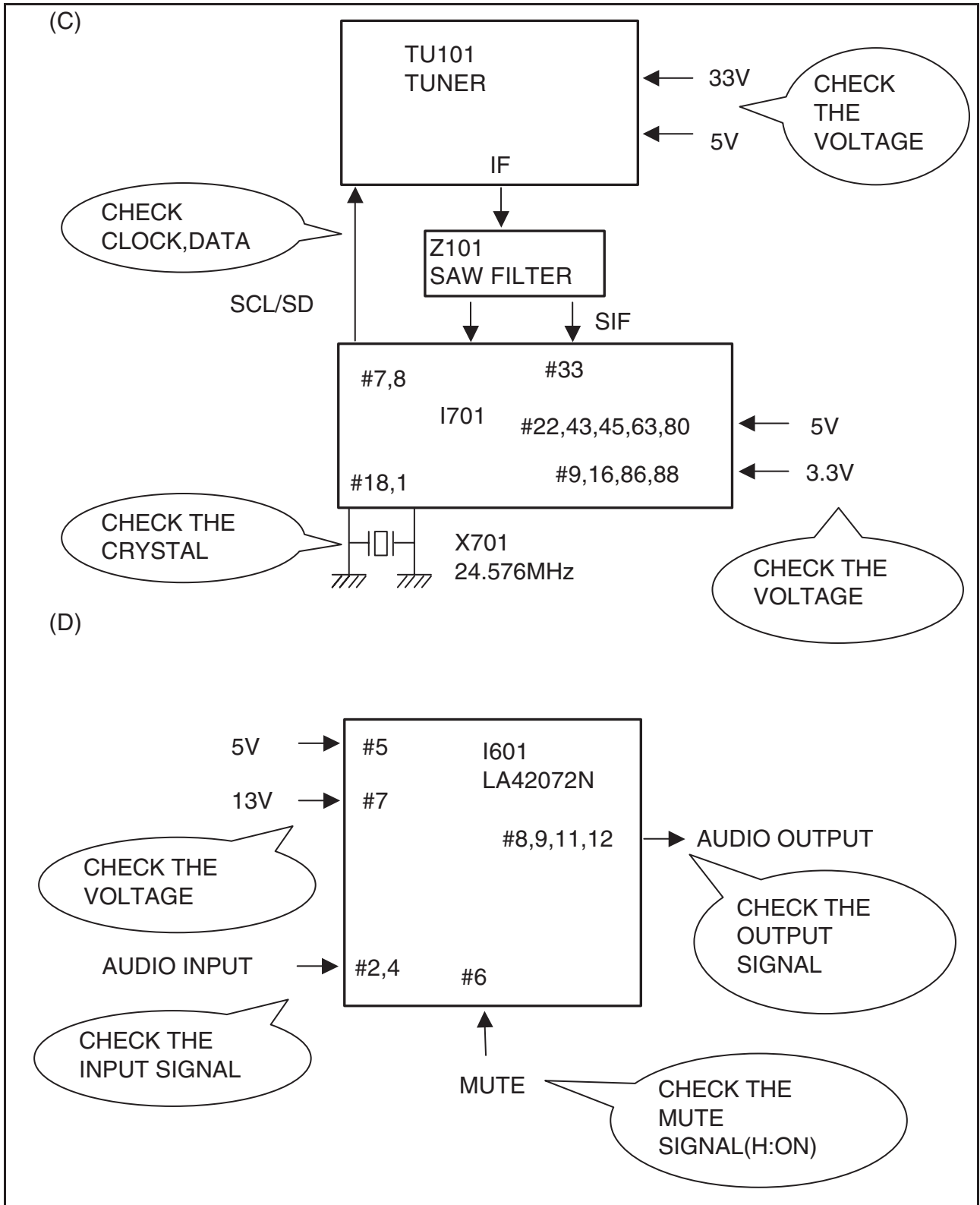
2. NO PICTURE

| | |
|------------------------------------|---------------------------|
| Check The Waveform of TU101 IF PIN | NG : Go To The Figure (A) |
| | OK : Go To The Figure (B) |



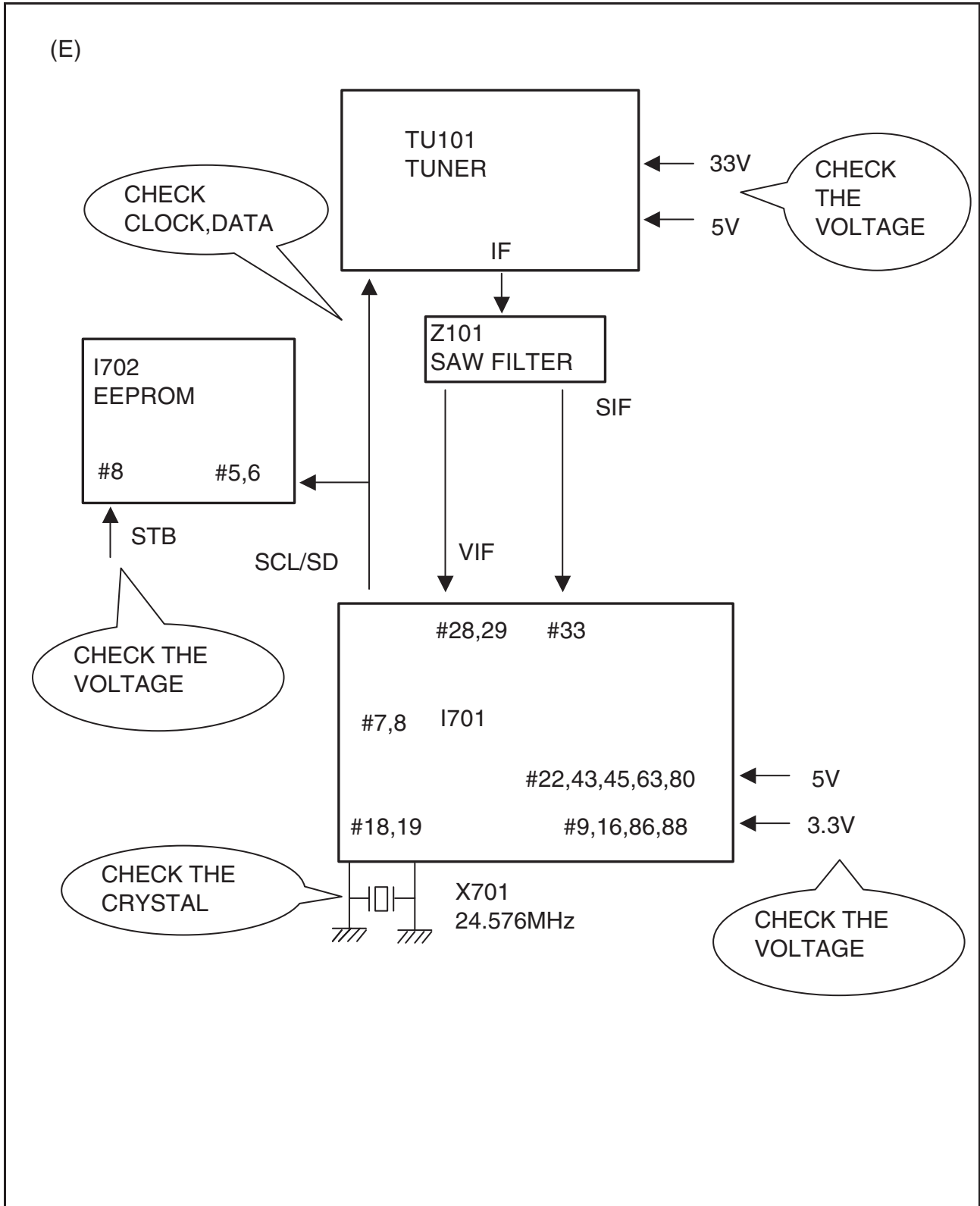
3. NO SOUND

| | |
|--|---------------------------|
| Check The Output Signal of I701 #57,58 | NG : Go To The Figure (C) |
| | OK : Go To The Figure (D) |

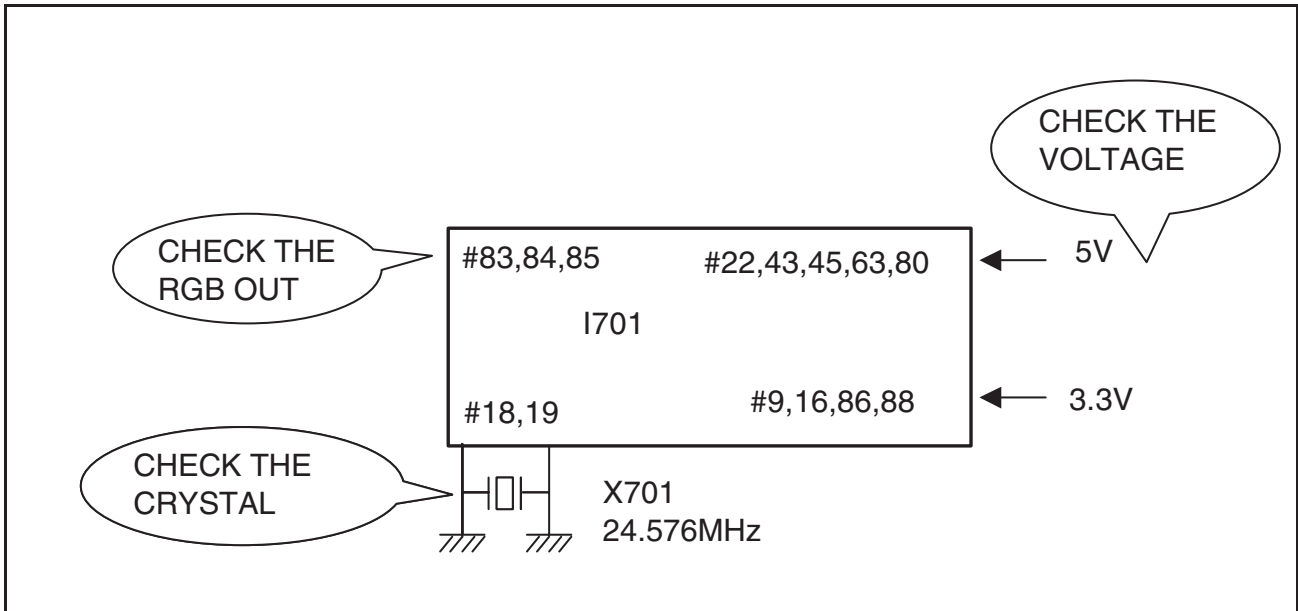


4. CH DON'T MEMORY or SKIP

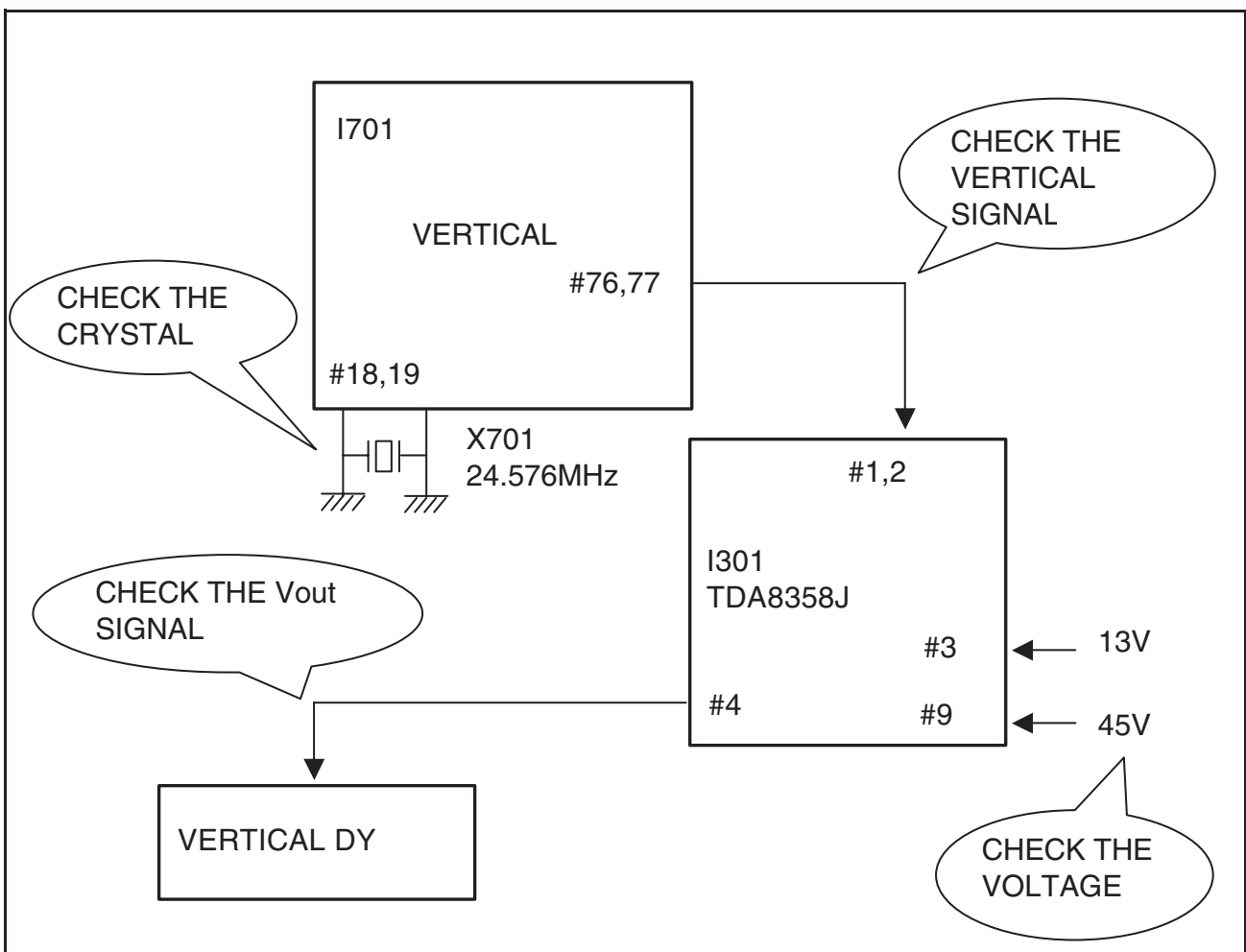
| | |
|-------------------------------------|------------------------------------|
| Check The loutput Signal Conditions | NG : Loss of Signal or Weak Signal |
| | OK : Go To The Figure (E) |



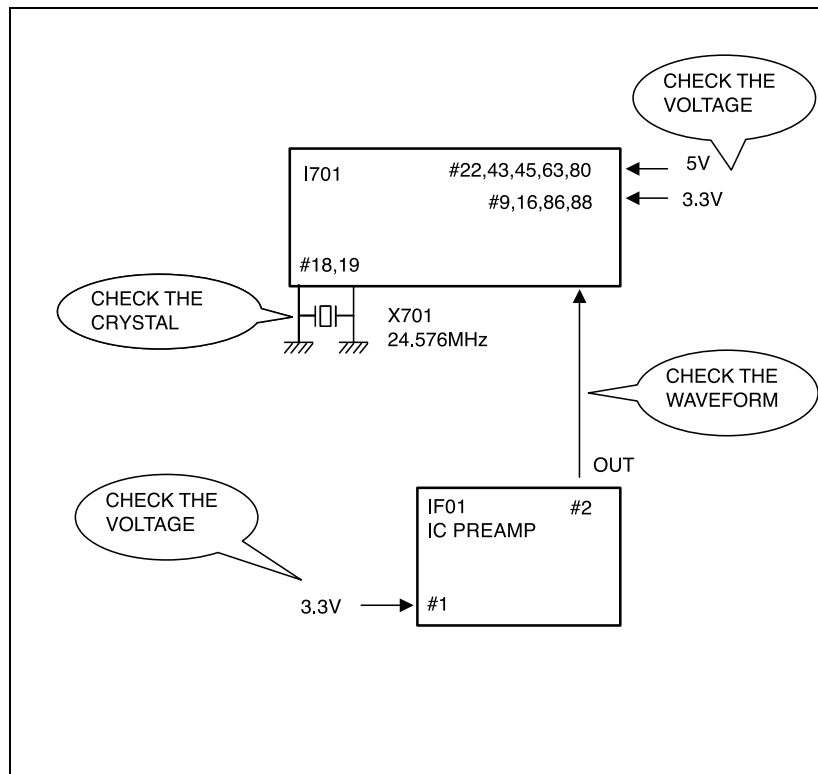
5. NO COLOR



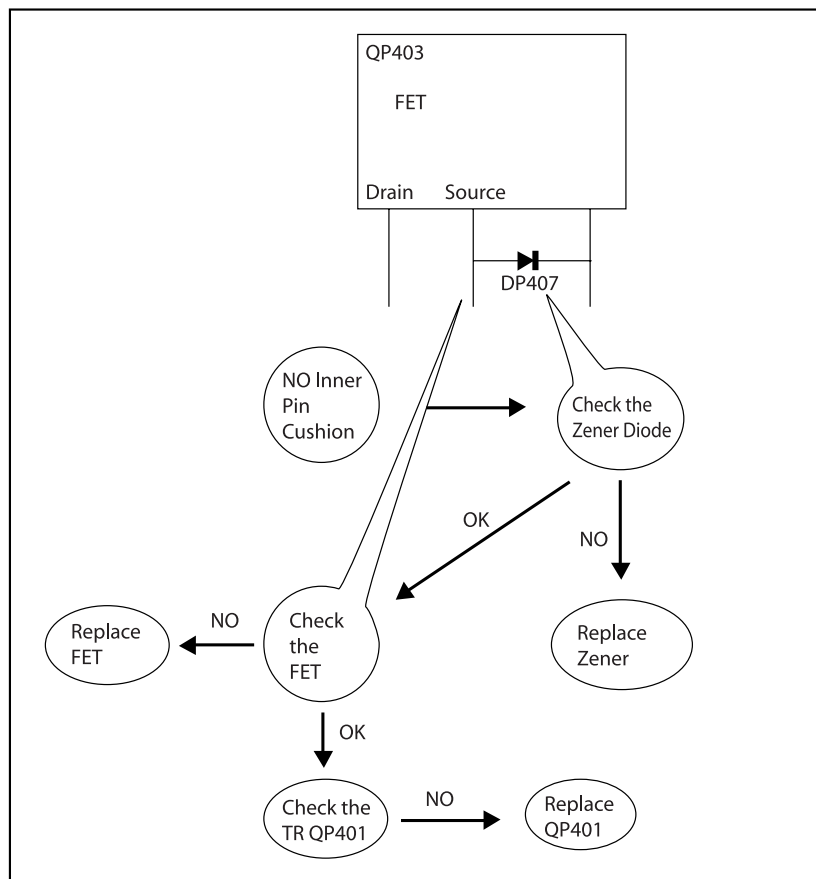
6. NO VERTICAL DEFLECTION



7. REMOTE CONTROL DOES NOT OPERATE



8. No Inner Pin Cushion



ELECTRICAL PARTS LIST

★Caution

: In this Manual, some parts can be changed for improving their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center(<http://svc.dwe.co.kr>)

**This BOM is based on DTH-2930SSFV

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|----|-------|------------|---------------------|---------------------------|--------|
| 1 | ZZ100 | 48B5748C04 | TRANSMITTER REMOCON | R-48C04 (AAA) | |
| 2 | ZZ110 | PTACPWK009 | ACCESSORY AS | DTQ-29U4SC | |
| 3 | ZZ120 | PTBCSHK016 | COVER BACK AS | DTQ-29U1SC | |
| 4 | M211 | 4852163100 | COVER BACK | FR HIPS GY 29U1 | |
| 5 | M781 | 4857817630 | CLOTH BLACK | FELT 400X20X0.7 | |
| 6 | M782 | 4857817612 | CLOTH BLACK | FELT 250X20X0.7 | |
| 7 | ZZ131 | 48519A4210 | CRT GROUND NET | 2901H-1015-2P | |
| 8 | ZZ132 | 58G0000143 | COIL DEGAUSSING | DC-29S1 | |
| 9 | ZZ140 | PTCACAK142 | CABINET AS | DTQ-29U1SCV | |
| 10 | M201C | 4856215404 | WASHER RUBBER | CR T4.0 | |
| 11 | M201E | 4856816300 | CLAMP WIRE | NYLON 6 (V0) | |
| 12 | V901 | 4859643460 | CRT | A68ELA021X103 (CHN) | |
| 13 | ZZ200 | PTFMSJK016 | MASK FRONT AS | DTQ-29U1SC | |
| 14 | M191 | 4851948400 | BUTTON CTRL | 4955100+5549200 29U1 | |
| 15 | M191A | 7178301011 | SCREW TAPPTITE | TT2 WAS 3X10 MFZN | |
| 16 | M201 | 4852083500 | MASK FRONT | FR HIPS GY 29U1 | |
| 17 | M481 | 4854864100 | BUTTON POWER | FR HIPS GY 29U1 | |
| 18 | M481A | 4856716000 | SPRING | SWPA PIE0.5 | |
| 19 | M561 | 4855617400 | MARK BRAND | CU AU+ABS BK | |
| 20 | M781 | 4857818703 | CLOTH BLACK | FELT 300X15XT1.0 | |
| 21 | ZZ201 | PTSPPWK129 | SPEAKER AS | DTQ-29U1V | |
| 22 | PA601 | 4850704S32 | CONNECTOR | YH025-04+YRT205+ULW=900 | |
| 23 | SP601 | 4858310810 | SPEAKER | SP-58126F01 | |
| 24 | SP602 | 4858310810 | SPEAKER | SP-58126F01 | |
| 25 | JA02 | 4859105450 | JACK PIN BOARD | YSC03P-4120-9S | |
| 26 | M111 | 4851114003 | PANEL AV ASSY | 2326802+5934301 | |
| 27 | M684 | 4856812001 | TIE CABLE | NYLON66 DA100 | |
| 28 | P201A | 4850705N21 | CONNECTOR | YH025-05+YBNH250+USW=400 | |
| 29 | 10 | 2TM14006LB | TAPE MASKING | 3M #232 6.0X2000M | |
| 30 | 20 | 2TM10006LB | TAPE MASKING | 3M #232-MAP-C 6.2X2000M | |
| 31 | A001 | 4859802917 | PCB JACK | 79.05X27.3(197X246/14)C1B | |
| 32 | CC608 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 33 | CCS07 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 34 | RC636 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 35 | RCS33 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 36 | ZZ290 | PTMPMSK142 | PCB MAIN MANUAL AS | DTQ-29U1SCV | |
| 37 | C118 | CMXL1J154J | C MYLAR | 63V MEU 0.15MF J | |
| 38 | C401 | CEYD1H689W | C ELECTRO | 50V RHD 6.8MF (16X35.5) | |
| 39 | C406 | CMYF2G394J | C MYLAR | 400V MPP 0.39MF J | |
| 40 | C407 | CMYH3C722J | C MYLAR | 1.6KV BUP 7200PF J | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|----|-------|------------|--------------------|---------------------------|--------|
| 41 | C408 | CMYH3C702J | C MYLAR | 1.6KV BUP 7000PF J | |
| 42 | C409 | CMYE2G273J | C MYLAR | 400V PU 0.027MF J | |
| 43 | C801 | CL1UC3474M | C LINE ACROSS | 0.47MF 1J(UCVSNDF/SV)+Q/O | |
| 44 | C802 | CL1UC3474M | C LINE ACROSS | 0.47MF 1J(UCVSNDF/SV)+Q/O | |
| 45 | C806 | CEYD2D331D | C ELECTRO | 200V FHS 330MF (22X30) | |
| 46 | C819 | CEYF1E332V | C ELECTRO | 25V RSS 3300MF (16X31.5) | |
| 47 | CS803 | CH1BFE222M | C CERA AC | U/C/V AC400V 2200PF | |
| 48 | CS804 | CH1BFE222M | C CERA AC | U/C/V AC400V 2200PF | |
| 49 | D402 | DDGP30L--- | DIODE | DGP30L | |
| 50 | D403 | DRGP30J--- | DIODE | RGP30J DO-201AD 600V 3A | |
| 51 | D801 | D1N5406G-- | DIODE | IN5406G | |
| 52 | D802 | D1N5406G-- | DIODE | IN5406G | |
| 53 | D803 | D1N5406G-- | DIODE | IN5406G | |
| 54 | D804 | D1N5406G-- | DIODE | IN5406G | |
| 55 | D809 | DRGP30J--- | DIODE | RGP30J DO-201AD 600V 3A | |
| 56 | D813 | DSR306E20- | DIODE | SR306E20 | |
| 57 | DL701 | DLH2PR5MH3 | LED HOLDER AS | LH-2P-R-5M-H3 | |
| 58 | I301 | PTA2SW8227 | HEAT SINK ASS'Y | 1TDA8358J- + 7174301011 | |
| 59 | 00001 | 1TDA8358J- | IC VERTICAL | TDA8358J | |
| 60 | 0000A | 4857028227 | HEAT SINK | AL EX BK | |
| 61 | 0000B | 7174301011 | SCREW TAPPTITE | TT2 RND 3X10 MFZN | |
| 62 | I601 | PTI2SW8200 | HEAT SINK ASS'Y | 1LA42072N- + 7174300811 | |
| 63 | 00001 | 1LA42072N- | IC AUDIO AMP | LA42072N | |
| 64 | 0000A | 4857028200 | HEAT SINK | AL EX BK | |
| 65 | 0000B | 7174300811 | SCREW TAPPTITE | TT2 RND 3X8 MFZN | |
| 66 | I701 | 1DA12001PQ | IC MICOM FLASH | TDA12001PQ | |
| 67 | I702 | 124LC16B1B | IC MEMORY | 24LC16B1B | |
| 68 | I801 | PTB2SW4401 | HEAT SINK ASS'Y | 1STRW6735- + 7174300811 | |
| 69 | 00001 | 1STRW6735- | IC POWER | STR-W6735 | |
| 70 | 0000A | 4857024401 | HEAT SINK | AL EX | |
| 71 | 0000B | 7174300811 | SCREW TAPPTITE | TT2 RND 3X8 MFZN | |
| 72 | I802 | 1LTV817C-- | IC PHOTO COUPLER | LTV-817C | |
| 73 | I803 | PTUASW6900 | HEAT SINK ASS'Y AS | 1LD1117V33 + 7174300811 | |
| 74 | 00001 | 1LD1117V33 | IC REGULATOR | LD1117AV33 3.3V 2% TO-220 | |
| 75 | 0000A | 4857026900 | HEAT SINK | AL EX | |
| 76 | 0000B | 7174300811 | SCREW TAPPTITE | TT2 RND 3X8 MFZN | |
| 77 | I805 | 1K78R05--- | IC REGULATOR | KIA78R05API | |
| 78 | IF01 | 1346VF6--- | IC PREAMP | 346VF6 | |
| 79 | JP501 | 4859111550 | JACK PIN BOARD | YPJ501B | |
| 80 | JP502 | 4859106440 | JACK S-VHS | PH-SJ-9503 | |
| 81 | JP503 | 4859107050 | JACK PIN BOARD | PH-JB-9601 (PH06P-4120-C) | |
| 82 | L401 | 58C7070085 | COIL CHOKE | TLN-3062A | |
| 83 | L402 | 58H0000033 | COIL H-LINEARITY | TRL-2532 | |
| 84 | L801 | 5PDLF3055L | FILTER LINE | DLF-3055L | |
| 85 | L807 | 58C0000090 | COIL CHOKE | L-45S | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|-------|------------|-----------------|---------------------------|--------|
| 86 | M681 | 4853747800 | RETA PCB | NYLON 66 | |
| 87 | M682 | 4853747800 | RETA PCB | NYLON 66 | |
| 88 | M683 | 4853747800 | RETA PCB | NYLON 66 | |
| 89 | PA906 | 4850708S03 | CONNECTOR | YH025-08+YST025+ULW=500 | |
| 90 | PW801 | 4859907810 | CORD POWER AS | ME301P+TER=2100 | |
| 91 | Q401 | TKTC3229-- | TR | KTC3229 | |
| 92 | Q402 | PTH2SW7609 | HEAT SINK ASS`Y | T2SD2578-- + 7174301011 | |
| 93 | 00001 | T2SD2578-- | TR HORI | 2SD2578 | |
| 94 | 0000A | 4857027609 | HEAT SINK | AL EX | |
| 95 | 0000B | 7174301011 | SCREW TAPPTITE | TT2 RND 3X10 MFZN | |
| 96 | R617 | RF02Y338K- | R FUSIBLE | 2W 0.33 OHM K | |
| 97 | R801 | RX10T109JS | R CEMENT | 10W 1 OHM J TRIPOD SMALL | |
| 98 | R837 | RM02Y158J- | R METAL FLAT | 2W 0.15 OHM J | |
| 99 | RY801 | DDB3R0M140 | POSISTOR | ECPBD3R0M140 | |
| 100 | SW707 | 5S50101035 | SW TACT | KPT-1112 1C-1P | |
| 101 | T401 | 5TD0000018 | TRANS DRIVE | THD-120 | |
| 102 | T402 | 50H0000287 | FBT | BSC29-0172D | |
| 103 | T801 | 50M4445B7- | TRANS SMPS | TSM-4445B7 | |
| 104 | TU101 | 4859726730 | TUNER VARACTOR | TAEC-H012F(A) | |
| 105 | X701 | 5XJ24R576E | CRYSTAL QUARTZ | HC-49/S 24.576MHZ 30PPM | |
| 106 | Y801 | 5SC0101339 | SW RELAY | SDT-S-105LMR | |
| 107 | Z101 | 5PTSB6221C | FILTER SAW | TSB6221C | |
| 108 | Z801 | DSVC471D14 | VARISTOR | SVC471D14A (BULK) | |
| 109 | C404 | CEXA2D229E | C ELECTRO | 200V RUL 2.2MF (10X16) TP | |
| 110 | C410 | CMXB2G472J | C MYLAR | 400V EU 4700PF J (TP) | |
| 111 | C411 | CEXF2E100V | C ELECTRO | 250V RSS 10MF (10X20) TP | |
| 112 | C412 | CCXB3D681K | C CERA | 2KV B 680PF K (TAPPING) | |
| 113 | C417 | CEXF1E102V | C ELECTRO | 25V RSS 1000MF (13X20) TP | |
| 114 | C419 | CEXF2A470V | C ELECTRO | 100V RSS 47MF (10X16) TP | |
| 115 | C613 | CEXF1E102V | C ELECTRO | 25V RSS 1000MF (13X20) TP | |
| 116 | C804 | CH1BEE472M | C CERA AC | U/C/V 2.5KV 4700PF TP | |
| 117 | C805 | CH1BEE472M | C CERA AC | U/C/V 2.5KV 4700PF TP | |
| 118 | C807 | CBXB3D102K | C CERA SEMI | 2KV BL(N) 1000PF K (T) | |
| 119 | C814 | CCXB3D221K | C CERA | 2KV B 220PF K (TAPPING) | |
| 120 | C815 | CBXB3D471K | C CERA SEMI | 2KV BL(N) 470PF K (T) | |
| 121 | C816 | CEXF2C101C | C ELECTRO | 160V RUS 100MF (16X25) TP | |
| 122 | C817 | CEXF2A470V | C ELECTRO | 100V RSS 47MF (10X16) TP | |
| 123 | C818 | CBXB3D471K | C CERA SEMI | 2KV BL(N) 470PF K (T) | |
| 124 | C820 | CEXF2C101C | C ELECTRO | 160V RUS 100MF (16X25) TP | |
| 125 | C835 | CEXF1C102V | C ELECTRO | 16V RSS 1000MF (10X20) TP | |
| 126 | C842 | CBXB3D471K | C CERA SEMI | 2KV BL(N) 470PF K (T) | |
| 127 | C852 | CEXF1E102V | C ELECTRO | 25V RSS 1000MF (13X20) TP | |
| 128 | P601 | 485923172S | CONN WAFER | YW025-04 (STICK) | |
| 129 | P705 | 485923172S | CONN WAFER | YW025-04 (STICK) | |
| 130 | P902 | 485923172S | CONN WAFER | YW025-04 (STICK) | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|-------|------------|----------------|---------------------------|--------|
| 131 | PA907 | 485923182S | CONN WAFER | YW025-05 (STICK) | |
| 132 | R106 | RS02Z512JS | R M-OXIDE FILM | 2W 5.1K OHM J SMALL | |
| 133 | R305 | RS02Z129JS | R M-OXIDE FILM | 2W 1.2 OHM J SMALL | |
| 134 | R401 | RS02Z100JS | R M-OXIDE FILM | 2W 10 OHM J SMALL | |
| 135 | R402 | RS02Z121JS | R M-OXIDE FILM | 2W 120 OHM J SMALL | |
| 136 | R407 | RS02Z223JS | R M-OXIDE FILM | 2W 22K OHM J SMALL | |
| 137 | R408 | RS02Z102JS | R M-OXIDE FILM | 2W 1K OHM J SMALL | |
| 138 | R409 | RS01Z103J- | R M-OXIDE FILM | 1W 10K OHM J (TAPPING) | |
| 139 | R411 | RS01Z229J- | R M-OXIDE FILM | 1W 2.2 OHM J (TAPPING) | |
| 140 | R414 | RF01Z828JA | R FUSIBLE | 1W 0.82 OHM J A CURVE | |
| 141 | R416 | RF01Z338K- | R FUSIBLE | 1W 0.33 OHM K (TAPPING) | |
| 142 | R417 | RS01Z229J- | R M-OXIDE FILM | 1W 2.2 OHM J (TAPPING) | |
| 143 | R802 | RS02Z913JS | R M-OXIDE FILM | 2W 91K OHM J SMALL | |
| 144 | R829 | RS02Z309JS | R M-OXIDE FILM | 2W 3 OHM J SMALL | |
| 145 | R836 | RS02Z109JS | R M-OXIDE FILM | 2W 1 OHM J SMALL | |
| 146 | C101 | CCXF1H103Z | C CERA | 50V F 0.01MF Z (TAPPING) | |
| 147 | C102 | CEXF1H100V | C ELECTRO | 50V RSS 10MF (5X11) TP | |
| 148 | C103 | CCXF1H103Z | C CERA | 50V F 0.01MF Z (TAPPING) | |
| 149 | C104 | CEXF1C221V | C ELECTRO | 16V RSS 220MF (8X11.5) TP | |
| 150 | C105 | CCXF1H103Z | C CERA | 50V F 0.01MF Z (TAPPING) | |
| 151 | C106 | CEXF1H229V | C ELECTRO | 50V RSS 2.2MF (5X11) TP | |
| 152 | C112 | CMXM2A682J | C MYLAR | 100V 6800PF J (TP) | |
| 153 | C114 | CEXF1H109V | C ELECTRO | 50V RSS 1MF (5X11) TP | |
| 154 | C115 | CMXL1J224J | C MYLAR | 63V MEU 0.22MF J (TP) | |
| 155 | C116 | CCXF1H223Z | C CERA | 50V F 0.022MF Z (TAPPING) | |
| 156 | C117 | CEXF1H100V | C ELECTRO | 50V RSS 10MF (5X11) TP | |
| 157 | C119 | CCXF1H103Z | C CERA | 50V F 0.01MF Z (TAPPING) | |
| 158 | C122 | CEXF1H229V | C ELECTRO | 50V RSS 2.2MF (5X11) TP | |
| 159 | C123 | CEXF1H229V | C ELECTRO | 50V RSS 2.2MF (5X11) TP | |
| 160 | C124 | CMXM2A473J | C MYLAR | 100V 0.047MF J (TP) | |
| 161 | C125 | CEXF1H229V | C ELECTRO | 50V RSS 2.2MF (5X11) TP | |
| 162 | C127 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 163 | C128 | CEXF1H229V | C ELECTRO | 50V RSS 2.2MF (5X11) TP | |
| 164 | C130 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 165 | C131 | CCXB1H102K | C CERA | 50V B 1000PF K (TAPPING) | |
| 166 | C201 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 167 | C202 | CEXF1H100V | C ELECTRO | 50V RSS 10MF (5X11) TP | |
| 168 | C204 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 169 | C301 | CMXM2A473J | C MYLAR | 100V 0.047MF J (TP) | |
| 170 | C305 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 171 | C306 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 172 | C307 | CCXF1H473Z | C CERA | 50V F 0.047MF Z (TAPPING) | |
| 173 | C308 | CCXF1H473Z | C CERA | 50V F 0.047MF Z (TAPPING) | |
| 174 | C402 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 175 | C403 | CCXB2H102K | C CERA | 500V B 1000PF K (TAPPING) | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|------|------------|------------|---------------------------|--------|
| 176 | C405 | CCXB2H561K | C CERA | 500V B 560PF K (TAPPING) | |
| 177 | C413 | CEXF1H470V | C ELECTRO | 50V RSS 47MF (6.3X11) TP | |
| 178 | C414 | CCXB2H102K | C CERA | 500V B 1000PF K (TAPPING) | |
| 179 | C416 | CCXB2H102K | C CERA | 500V B 1000PF K (TAPPING) | |
| 180 | C418 | CCXB2H102K | C CERA | 500V B 1000PF K (TAPPING) | |
| 181 | C420 | CCXB2H102K | C CERA | 500V B 1000PF K (TAPPING) | |
| 182 | C422 | CMXM2A473J | C MYLAR | 100V 0.047MF J (TP) | |
| 183 | C423 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 184 | C601 | CEXF1E470V | C ELECTRO | 25V RSS 47MF (5X11) TP | |
| 185 | C602 | CMXL1J224J | C MYLAR | 63V MEU 0.22MF J (TP) | |
| 186 | C603 | CMXL1J224J | C MYLAR | 63V MEU 0.22MF J (TP) | |
| 187 | C604 | CEXF1H100V | C ELECTRO | 50V RSS 10MF (5X11) TP | |
| 188 | C605 | CMXM2A682J | C MYLAR | 100V 6800PF J (TP) | |
| 189 | C606 | CMXM2A682J | C MYLAR | 100V 6800PF J (TP) | |
| 190 | C607 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 191 | C608 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 192 | C609 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 193 | C610 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 194 | C614 | CEXF1C470V | C ELECTRO | 16V RSS 47MF (5X11) TP | |
| 195 | C619 | CMXM2A103J | C MYLAR | 100V 0.01MF J (TP) | |
| 196 | C620 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 197 | C622 | CEXF1H478V | C ELECTRO | 50V RSS 0.47MF (5X11) TP | |
| 198 | C623 | CEXF1H478V | C ELECTRO | 50V RSS 0.47MF (5X11) TP | |
| 199 | C624 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 200 | C625 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 201 | C626 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 202 | C627 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 203 | C628 | CEXF1H478V | C ELECTRO | 50V RSS 0.47MF (5X11) TP | |
| 204 | C629 | CEXF1H478V | C ELECTRO | 50V RSS 0.47MF (5X11) TP | |
| 205 | C701 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 206 | C704 | CEXF1E470V | C ELECTRO | 25V RSS 47MF (5X11) TP | |
| 207 | C705 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 208 | C707 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 209 | C713 | CEXF1C470V | C ELECTRO | 16V RSS 47MF (5X11) TP | |
| 210 | C716 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 211 | C721 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 212 | C722 | CMXL1J224J | C MYLAR | 63V MEU 0.22MF J (TP) | |
| 213 | C723 | CEXF1H229V | C ELECTRO | 50V RSS 2.2MF (5X11) TP | |
| 214 | C724 | CXCH1H809D | C CERA | 50V CH 8PF D (TAPPING) | |
| 215 | C725 | CXCH1H809D | C CERA | 50V CH 8PF D (TAPPING) | |
| 216 | C726 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 217 | C727 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 218 | C729 | CEXF1H479V | C ELECTRO | 50V RSS 4.7MF (5X11) TP | |
| 219 | C730 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 220 | C731 | CEXF1E470V | C ELECTRO | 25V RSS 47MF (5X11) TP | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|-------|------------|---------------------|---------------------------|--------|
| 221 | C732 | CMXL1J224J | C MYLAR | 63V MEU 0.22MF J (TP) | |
| 222 | C734 | CMXL1J224J | C MYLAR | 63V MEU 0.22MF J (TP) | |
| 223 | C735 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 224 | C737 | CBXF1H104Z | C CERA SEMI | 50V F 0.1MF Z (TAPPING) | |
| 225 | C740 | CEXF1C101V | C ELECTRO | 16V RSS 100MF (6.3X11) TP | |
| 226 | C809 | CEXF1H109V | C ELECTRO | 50V RSS 1MF (5X11) TP | |
| 227 | C810 | CCXF1H223Z | C CERA | 50V F 0.022MF Z (TAPPING) | |
| 228 | C811 | CMXM2A104J | C MYLAR | 100V 0.1MF J (TP) | |
| 229 | C812 | CCXB1H821K | C CERA | 50V B 820PF K (TAPPING) | |
| 230 | C813 | CCXB1H471K | C CERA | 50V B 470PF K (TAPPING) | |
| 231 | C821 | CEXF1H479V | C ELECTRO | 50V RSS 4.7MF (5X11) TP | |
| 232 | C824 | CMXL1J154J | C MYLAR | 63V MEU 0.15MF J | |
| 233 | C826 | CEXF1E221V | C ELECTRO | 25V RSS 220MF (8X11.5) TP | |
| 234 | C827 | CEXF1C331V | C ELECTRO | 16V RSS 330MF (8X11.5) TP | |
| 235 | C828 | CEXF1H479V | C ELECTRO | 50V RSS 4.7MF (5X11) TP | |
| 236 | C834 | CMXL1J104J | C MYLAR | 63V MEU 0.1MF J | |
| 237 | C836 | CEXF1E221V | C ELECTRO | 25V RSS 220MF (8X11.5) TP | |
| 238 | C837 | CEXF1H470V | C ELECTRO | 50V RSS 47MF (6.3X11) TP | |
| 239 | CA07 | CCXB1H102K | C CERA | 50V B 1000PF K (TAPPING) | |
| 240 | CA08 | CCXB1H102K | C CERA | 50V B 1000PF K (TAPPING) | |
| 241 | CV12 | CEXF1C470V | C ELECTRO | 16V RSS 47MF (5X11) TP | |
| 242 | F801 | 5FWPS5022L | FUSE | WIDE TL 250V 5A CASE | |
| 243 | I804 | 1K1A431B— | IC REGULATOR(SHUNT) | KIA431B 2.495V 0.5% TO-92 | |
| 244 | L808 | 58C0000142 | COIL CHOKE | ELC 0809 940K | |
| 245 | Q101 | TKTC3198Y- | TR | KTC3198Y | |
| 246 | Q201 | TKTA1266Y- | TR | KTA1266Y (TP) | |
| 247 | Q602 | TKTA1266Y- | TR | KTA1266Y (TP) | |
| 248 | Q704 | TKTC3198Y- | TR | KTC3198Y | |
| 249 | Q705 | TKTA1270Y- | TR | KTA1270Y (TP) | |
| 250 | Q706 | TKTC3198Y- | TR | KTC3198Y | |
| 251 | Q707 | TKTA1270Y- | TR | KTA1270Y (TP) | |
| 252 | Q708 | TKTC3198Y- | TR | KTC3198Y | |
| 253 | Q801 | TKTC3203Y- | TR | KTC3203-Y | |
| 254 | Q804 | TKTC3198Y- | TR | KTC3198Y | |
| 255 | Q805 | TKTC3198Y- | TR | KTC3198Y | |
| 256 | QV01 | TKTC3198Y- | TR | KTC3198Y | |
| 257 | QV02 | TKTA1266Y- | TR | KTA1266Y (TP) | |
| 258 | R302 | RN02B181JS | R METAL FILM | 2W 180 OHM J SMALL | |
| 259 | R403 | RN01B472JS | R METAL FILM | 1W 4.7K OHM J SMALL | |
| 260 | SW701 | 5S50101090 | SW TACT | THVH472GCA | |
| 261 | SW702 | 5S50101090 | SW TACT | THVH472GCA | |
| 262 | SW703 | 5S50101090 | SW TACT | THVH472GCA | |
| 263 | SW704 | 5S50101090 | SW TACT | THVH472GCA | |
| 264 | SW705 | 5S50101090 | SW TACT | THVH472GCA | |
| 265 | SW706 | 5S50101090 | SW TACT | THVH472GCA | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|------|------------|-------------|---------------------------|--------|
| 266 | A001 | 4859818691 | PCB MAIN | 330X246 D1B | |
| 267 | C107 | CZSL1H470J | C CERA | 50V SL 47PF J (AXIAL) | |
| 268 | C108 | CZSL1H470J | C CERA | 50V SL 47PF J (AXIAL) | |
| 269 | C109 | CCZF1H103Z | C CERA | 50V F 0.01MF Z | |
| 270 | C110 | CCZB1H222K | C CERA | 50V B 2200PF K AXIAL | |
| 271 | C111 | CCZB1H222K | C CERA | 50V B 2200PF K AXIAL | |
| 272 | C126 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 273 | C129 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 274 | C203 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 275 | C205 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 276 | C206 | CCZB1H472K | C CERA | HIKB 50V 4700PF K AXIAL | |
| 277 | C612 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 278 | C702 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 279 | C703 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 280 | C706 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 281 | C712 | CCZB1H561K | C CERA | 50V B 560PF K | |
| 282 | C714 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 283 | C715 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 284 | C717 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 285 | C719 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 286 | C720 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 287 | C728 | CCZF1H103Z | C CERA | 50V F 0.01MF Z | |
| 288 | C733 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 289 | C736 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 290 | C738 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 291 | C739 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 292 | CA03 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 293 | CA04 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 294 | CA05 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 295 | CA06 | CCZB1H102K | C CERA | 50V B 1000PF K (AXIAL) | |
| 296 | CV13 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 297 | CV14 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 298 | CV15 | CBZF1H104Z | C CERA SEMI | 50V F 0.1MF Z | |
| 299 | D101 | DUZ33B-- | DIODE ZENER | UZ-33B | |
| 300 | D301 | D1N4937G-- | DIODE | 1N4937G (TAPPING) | |
| 301 | D401 | D1N4937G-- | DIODE | 1N4937G (TAPPING) | |
| 302 | D404 | DUZ9R1BM-- | DIODE ZENER | UZ-9.1BM | |
| 303 | D405 | D1N4937G-- | DIODE | 1N4937G (TAPPING) | |
| 304 | D406 | D1N4937G-- | DIODE | 1N4937G (TAPPING) | |
| 305 | D407 | DRGP15J-- | DIODE | RGP15J DO-204AC 600V 1.5A | |
| 306 | D408 | DRGP15J-- | DIODE | RGP15J DO-204AC 600V 1.5A | |
| 307 | D602 | D1N4148-- | DIODE | 1N4148 (TAPPING) | |
| 308 | D701 | DUZ3R9B-- | DIODE ZENER | UZ-3.9B | |
| 309 | D702 | D1N4148-- | DIODE | 1N4148 (TAPPING) | |
| 310 | D703 | D1N4148-- | DIODE | 1N4148 (TAPPING) | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|------|------------|---------------|---------------------------|--------|
| 311 | D706 | DUZ3R3B--- | DIODE ZENER | UZ-3.3B | |
| 312 | D805 | D1N4937G-- | DIODE | 1N4937G (TAPPING) | |
| 313 | D806 | D1N4937G-- | DIODE | 1N4937G (TAPPING) | |
| 314 | D807 | D1N4937G-- | DIODE | 1N4937G (TAPPING) | |
| 315 | D808 | DMTZJ6R2C- | DIODE ZENER | MTZJ 6.2C | |
| 316 | D810 | D1N4937G-- | DIODE | 1N4937G (TAPPING) | |
| 317 | D812 | DRGP15J-- | DIODE | RGP15J DO-204AC 600V 1.5A | |
| 318 | D814 | DUZ4R3B--- | DIODE ZENER | UZ-4R3B | |
| 319 | D815 | D1N4148--- | DIODE | 1N4148 (TAPPING) | |
| 320 | DV02 | DMTZJ5R6B- | DIODE ZENER | MTZJ 5.6B | |
| 321 | DV03 | DMTZJ5R6B- | DIODE ZENER | MTZJ 5.6B | |
| 322 | DV05 | DMTZJ5R6B- | DIODE ZENER | MTZJ 5.6B | |
| 323 | DV06 | DMTZJ5R6B- | DIODE ZENER | MTZJ 5.6B | |
| 324 | L101 | 5CPZ470K04 | COIL PEAKING | 47UH 10.5MM K (LAL04TB) | |
| 325 | L103 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 326 | L104 | 5CPZ479K04 | COIL PEAKING | 4.7UH K (AXIAL 10.5MM) | |
| 327 | L201 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 328 | L301 | 5MC0000100 | COIL BEAD | HC-3550 | |
| 329 | L302 | 5MC0000100 | COIL BEAD | HC-3550 | |
| 330 | L403 | 5MC0000100 | COIL BEAD | HC-3550 | |
| 331 | L701 | 5CPZ479K04 | COIL PEAKING | 4.7UH K (AXIAL 10.5MM) | |
| 332 | L702 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 333 | L703 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 334 | L704 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 335 | L705 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 336 | L706 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 337 | L707 | 5CPZ479K04 | COIL PEAKING | 4.7UH K (AXIAL 10.5MM) | |
| 338 | L709 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 339 | L714 | 5CPZ479K02 | COIL PEAKING | 4.7UH K (AXIAL 3.5MM) | |
| 340 | L803 | 5MC0000100 | COIL BEAD | HC-3550 | |
| 341 | L804 | 5MC0000100 | COIL BEAD | HC-3550 | |
| 342 | L805 | 5MC0000100 | COIL BEAD | HC-3550 | |
| 343 | L806 | 5MC0000100 | COIL BEAD | HC-3550 | |
| 344 | R101 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 345 | R102 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 346 | R103 | RD-AZ472J- | R CARBON FILM | 1/6 4.7K OHM J | |
| 347 | R104 | RD-AZ100J- | R CARBON FILM | 1/6 10 OHM J | |
| 348 | R105 | RD-AZ473J- | R CARBON FILM | 1/6 47K OHM J | |
| 349 | R107 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 350 | R108 | RD-AZ472J- | R CARBON FILM | 1/6 4.7K OHM J | |
| 351 | R111 | RD-AZ181J- | R CARBON FILM | 1/6 180 OHM J | |
| 352 | R112 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 353 | R113 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 354 | R114 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 355 | R119 | RD-AZ393J- | R CARBON FILM | 1/6 39K OHM J | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|------|------------|---------------|--------------------------|--------|
| 356 | R121 | RD-AZ183J- | R CARBON FILM | 1/6 18K OHM J | |
| 357 | R201 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 358 | R203 | RN-AZ1801F | R METAL FILM | 1/6 1.8K OHM F | |
| 359 | R204 | RD-4Z222J- | R CARBON FILM | 1/4 2.2K OHM J | |
| 360 | R213 | RD-AZ750J- | R CARBON FILM | 1/6 75 OHM J | |
| 361 | R301 | RD-4Z159J- | R CARBON FILM | 1/4 1.5 OHM J | |
| 362 | R303 | RD-AZ272J- | R CARBON FILM | 1/6 2.7K OHM J | |
| 363 | R304 | RD-AZ823J- | R CARBON FILM | 1/6 82K OHM J | |
| 364 | R306 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 365 | R307 | RN-AZ2201F | R METAL FILM | 1/6 2.2K OHM F | |
| 366 | R308 | RD-4Z514J- | R CARBON FILM | 1/4 510K OHM J | |
| 367 | R310 | RD-AZ104J- | R CARBON FILM | 1/6 100K OHM J | |
| 368 | R311 | RD-4Z563J- | R CARBON FILM | 1/4 56K OHM J | |
| 369 | R312 | RN-AZ2201F | R METAL FILM | 1/6 2.2K OHM F | |
| 370 | R313 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 371 | R314 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 372 | R404 | RD-AZ122J- | R CARBON FILM | 1/6 1.2K OHM J | |
| 373 | R405 | RD-AZ471J- | R CARBON FILM | 1/6 470 OHM J | |
| 374 | R406 | RD-4Z220J- | R CARBON FILM | 1/4 22 OHM J | |
| 375 | R410 | RN-AZ9101F | R METAL FILM | 1/6 9.1K OHM F | |
| 376 | R412 | RN-AZ1202F | R METAL FILM | 1/6 12K OHM F | |
| 377 | R413 | RD-4Z470J- | R CARBON FILM | 1/4 47 OHM J | |
| 378 | R418 | RD-4Z102J- | R CARBON FILM | 1/4 1K OHM J | |
| 379 | R601 | RD-AZ622J- | R CARBON FILM | 1/6 6.2K OHM J | |
| 380 | R602 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 381 | R604 | RD-AZ392J- | R CARBON FILM | 1/6 3.9K OHM J | |
| 382 | R605 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 383 | R606 | RD-AZ392J- | R CARBON FILM | 1/6 3.9K OHM J | |
| 384 | R607 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 385 | R609 | RD-AZ202J- | R CARBON FILM | 1/6 2K OHM J | |
| 386 | R610 | RD-AZ223J- | R CARBON FILM | 1/6 22K OHM J | |
| 387 | R612 | RD-AZ153J- | R CARBON FILM | 1/6 15K OHM J | |
| 388 | R613 | RD-4Z229J- | R CARBON FILM | 1/4 2.2 OHM J | |
| 389 | R614 | RD-4Z229J- | R CARBON FILM | 1/4 2.2 OHM J | |
| 390 | R615 | RD-4Z229J- | R CARBON FILM | 1/4 2.2 OHM J | |
| 391 | R616 | RD-4Z229J- | R CARBON FILM | 1/4 2.2 OHM J | |
| 392 | R620 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 393 | R622 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 394 | R623 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 395 | R624 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 396 | R625 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 397 | R626 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 398 | R627 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 399 | R628 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 400 | R629 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |

ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|------|------------|---------------|--------------------------|--------|
| 401 | R630 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 402 | R632 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 403 | R633 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 404 | R634 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 405 | R635 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 406 | R636 | RD-AZ472J- | R CARBON FILM | 1/6 4.7K OHM J | |
| 407 | R701 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 408 | R702 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 409 | R703 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 410 | R704 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 411 | R705 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 412 | R707 | RN-AZ5600F | R METAL FILM | 1/6 560 OHM F | |
| 413 | R708 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 414 | R709 | RD-AZ823J- | R CARBON FILM | 1/6 82K OHM J | |
| 415 | R710 | RD-AZ563J- | R CARBON FILM | 1/6 56K OHM J | |
| 416 | R712 | RD-4Z222J- | R CARBON FILM | 1/4 2.2K OHM J | |
| 417 | R713 | RD-AZ470J- | R CARBON FILM | 1/6 47 OHM J | |
| 418 | R714 | RD-AZ123J- | R CARBON FILM | 1/6 12K OHM J | |
| 419 | R719 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 420 | R720 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 421 | R722 | RD-AZ100J- | R CARBON FILM | 1/6 10 OHM J | |
| 422 | R723 | RD-AZ122J- | R CARBON FILM | 1/6 1.2K OHM J | |
| 423 | R725 | RD-AZ513J- | R CARBON FILM | 1/6 51K OHM J | |
| 424 | R726 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 425 | R727 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 426 | R729 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 427 | R730 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 428 | R732 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 429 | R733 | RD-AZ472J- | R CARBON FILM | 1/6 4.7K OHM J | |
| 430 | R735 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 431 | R736 | RD-AZ472J- | R CARBON FILM | 1/6 4.7K OHM J | |
| 432 | R742 | RD-AZ181J- | R CARBON FILM | 1/6 180 OHM J | |
| 433 | R743 | RD-AZ151J- | R CARBON FILM | 1/6 150 OHM J | |
| 434 | R744 | RD-AZ181J- | R CARBON FILM | 1/6 180 OHM J | |
| 435 | R745 | RD-AZ241J- | R CARBON FILM | 1/6 240 OHM J | |
| 436 | R746 | RD-AZ331J- | R CARBON FILM | 1/6 330 OHM J | |
| 437 | R747 | RD-AZ471J- | R CARBON FILM | 1/6 470 OHM J | |
| 438 | R748 | RD-AZ222J- | R CARBON FILM | 1/6 2.2K OHM J | |
| 439 | R769 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 440 | R770 | RD-AZ223J- | R CARBON FILM | 1/6 22K OHM J | |
| 441 | R772 | RD-4Z473J- | R CARBON FILM | 1/4 47K OHM J | |
| 442 | R773 | RD-AZ472J- | R CARBON FILM | 1/6 4.7K OHM J | |
| 443 | R774 | RD-4Z473J- | R CARBON FILM | 1/4 47K OHM J | |
| 444 | R775 | RD-AZ472J- | R CARBON FILM | 1/6 4.7K OHM J | |
| 445 | R776 | RD-AZ332J- | R CARBON FILM | 1/6 3.3K OHM J | |

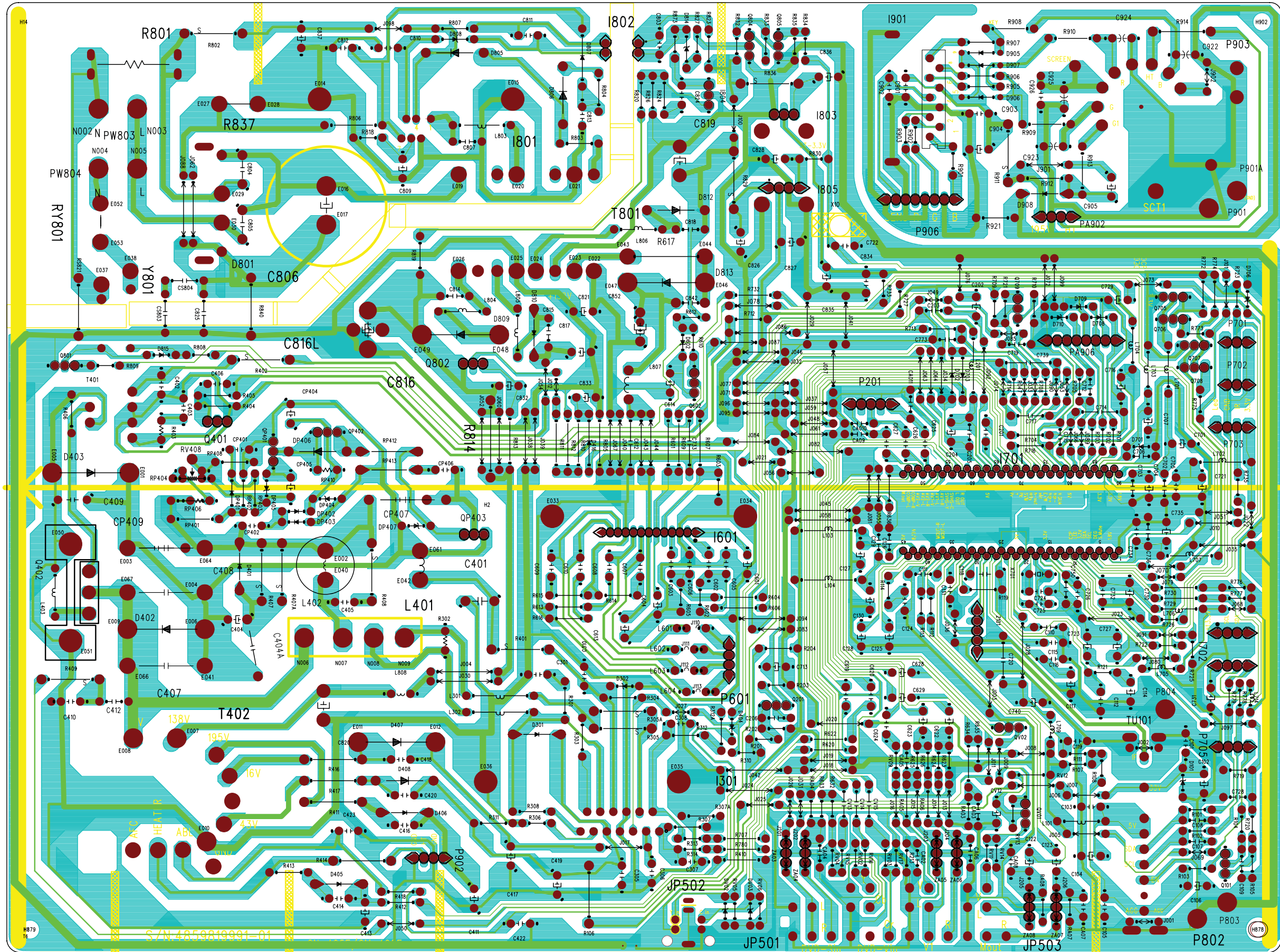
ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|-------|------------|---------------|--------------------------|--------|
| 446 | R777 | RD-AZ332J- | R CARBON FILM | 1/6 3.3K OHM J | |
| 447 | R778 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 448 | R779 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 449 | R780 | RN-AZ5600F | R METAL FILM | 1/6 560 OHM F | |
| 450 | R803 | RD-4Z479J- | R CARBON FILM | 1/4 4.7 OHM J | |
| 451 | R804 | RD-4Z152J- | R CARBON FILM | 1/4 1.5K OHM J | |
| 452 | R805 | RD-4Z100J- | R CARBON FILM | 1/4 10 OHM J | |
| 453 | R806 | RD-4Z331J- | R CARBON FILM | 1/4 330 OHM J | |
| 454 | R807 | RD-4Z102J- | R CARBON FILM | 1/4 1K OHM J | |
| 455 | R808 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 456 | R809 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 457 | R819 | RN-4Z1003F | R METAL FILM | 1/4 100K OHM F | |
| 458 | R820 | RN-4Z1502F | R METAL FILM | 1/4 15K OHM F | |
| 459 | R823 | RD-AZ152J- | R CARBON FILM | 1/6 1.5K OHM J | |
| 460 | R824 | RD-AZ333J- | R CARBON FILM | 1/6 33K OHM J | |
| 461 | R826 | RN-AZ2201F | R METAL FILM | 1/6 2.2K OHM F | |
| 462 | R827 | RD-AZ511J- | R CARBON FILM | 1/6 510 OHM J | |
| 463 | R830 | RD-AZ472J- | R CARBON FILM | 1/6 4.7K OHM J | |
| 464 | R832 | RD-AZ752J- | R CARBON FILM | 1/6 7.5K OHM J | |
| 465 | R833 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 466 | R834 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 467 | R835 | RD-AZ103J- | R CARBON FILM | 1/6 10K OHM J | |
| 468 | R873 | RD-AZ391J- | R CARBON FILM | 1/6 390 OHM J | |
| 469 | RA03 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 470 | RA04 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 471 | RA05 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 472 | RA06 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 473 | RA07 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 474 | RA08 | RD-AZ224J- | R CARBON FILM | 1/6 220K OHM J | |
| 475 | RS801 | RC-2Z225KP | R CARBON COMP | 1/2 2.2M OHM K | |
| 476 | RS821 | RC-2Z225KP | R CARBON COMP | 1/2 2.2M OHM K | |
| 477 | RV01J | RD-AZ750J- | R CARBON FILM | 1/6 75 OHM J | |
| 478 | RV02 | RD-AZ750J- | R CARBON FILM | 1/6 75 OHM J | |
| 479 | RV03 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 480 | RV04 | RD-AZ750J- | R CARBON FILM | 1/6 75 OHM J | |
| 481 | RV05 | RD-AZ750J- | R CARBON FILM | 1/6 75 OHM J | |
| 482 | RV06 | RD-AZ750J- | R CARBON FILM | 1/6 75 OHM J | |
| 483 | RV09 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 484 | RV10 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 485 | RV11 | RD-AZ750J- | R CARBON FILM | 1/6 75 OHM J | |
| 486 | RV12 | RD-4Z220J- | R CARBON FILM | 1/4 22 OHM J | |
| 487 | RV13 | RD-AZ222J- | R CARBON FILM | 1/6 2.2K OHM J | |
| 488 | RV14 | RD-AZ102J- | R CARBON FILM | 1/6 1K OHM J | |
| 489 | RV15 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |
| 490 | RV16 | RD-AZ101J- | R CARBON FILM | 1/6 100 OHM J | |

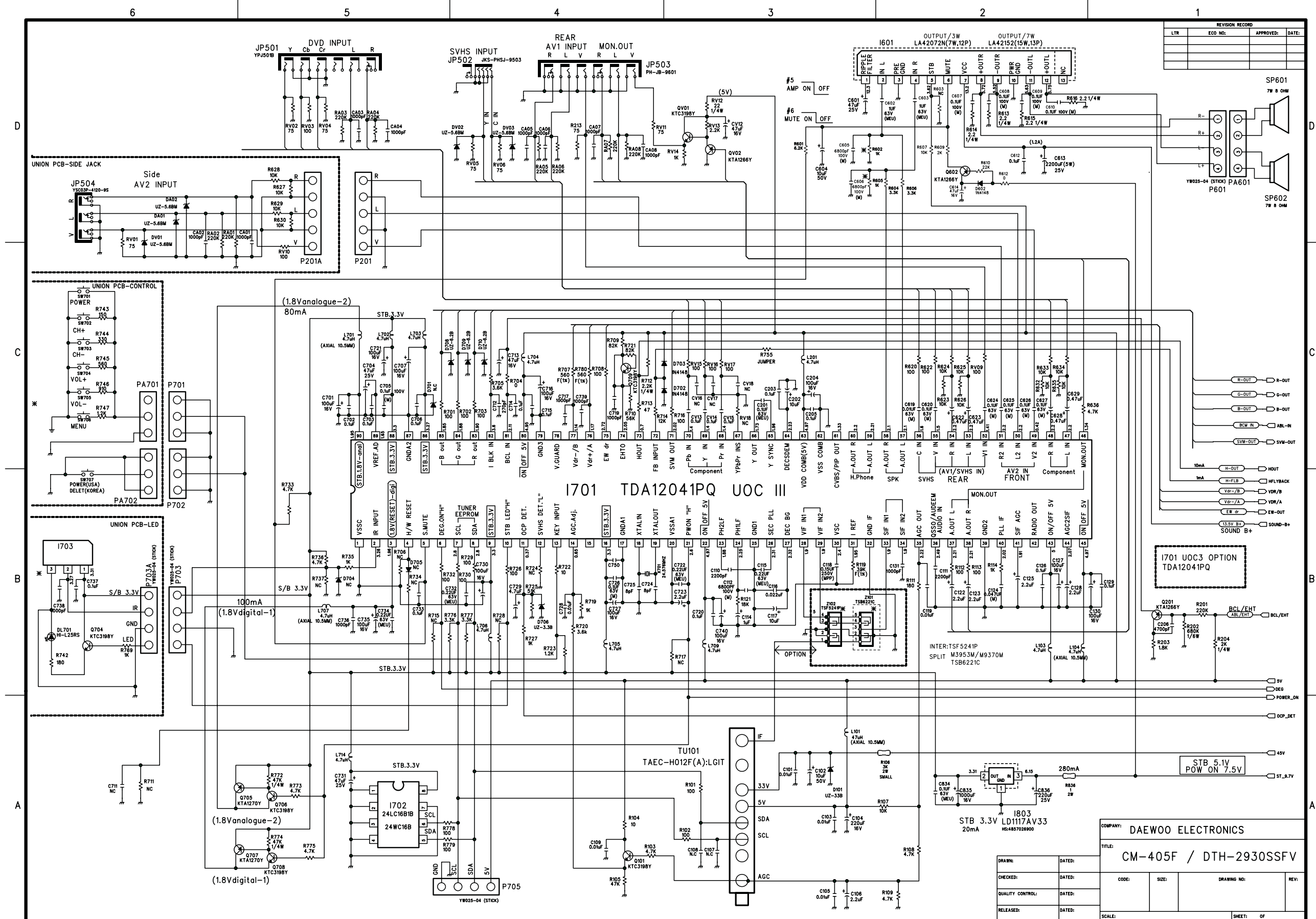
ELECTRICAL PARTS LIST

| NO | LOC | PARTS CODE | PARTS NAME | PARTS DESCRIPTION | REMARK |
|-----|-------|------------|-------------------|--------------------------|--------|
| 491 | RV17 | RD-AZ750J- | R CARBON FILM | 1/6 75 OHM J | |
| 492 | ZA03 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 493 | ZA04 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 494 | ZA05 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 495 | ZA07 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 496 | ZA08 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 497 | ZZ300 | PTCPMSK142 | PCB CRT MANUAL AS | DTQ-29U1SCV | |
| 498 | I901 | PTE3SW1100 | HEAT SINK ASS'Y | 1TDA6107AJ + 7174300811 | |
| 499 | 00001 | 1TDA6107AJ | IC VIDEO | TDA6107AJF | |
| 500 | 0000A | 4857031100 | HEAT SINK | A1050P-H24 T2.0 | |
| 501 | 0000B | 7174300811 | SCREW TAPPTITE | TT2 RND 3X8 MFZN | |
| 502 | P903 | 4859238620 | CONN WAFER | YPW500-02 | |
| 503 | PA902 | 4850704S04 | CONNECTOR | YH025-04+YST025+ULW=400 | |
| 504 | SCT1 | 4859303530 | SOCKET CRT | PCS629-03C | |
| 505 | C904 | CEXF2E479V | C ELECTRO | 250V RSS 4.7MF (10X16)TP | |
| 506 | C905 | CEXF2E479V | C ELECTRO | 250V RSS 4.7MF (10X16)TP | |
| 507 | C926 | CBXB3D102K | C CERA SEMI | 2KV BL(N) 1000PF K (T) | |
| 508 | P906 | 485923512S | CONN WAFER | YW025-08 (STICK) | |
| 509 | R911 | RS02Z151JS | R M-OXIDE FILM | 2W 150 OHM J SMALL | |
| 510 | R914 | RF01Z109J- | R FUSIBLE | 1W 1 OHM J (TAPPING) | |
| 511 | C902 | CCXB1H561K | C CERA | 50V B 560PF K (TAPPING) | |
| 512 | C903 | CMXL2E104K | C MYLAR | 250V MEU 0.1MF K | |
| 513 | C922 | 4SG0DX0001 | SPARK GAP | SSG-102-A1(1.0KV) TAP | |
| 514 | C923 | 4SG0DX0001 | SPARK GAP | SSG-102-A1(1.0KV) TAP | |
| 515 | C924 | 4SG0DX0001 | SPARK GAP | SSG-102-A1(1.0KV) TAP | |
| 516 | C925 | 4SG0DX0001 | SPARK GAP | SSG-102-A1(1.0KV) TAP | |
| 517 | A001 | 4859830213 | PCB CRT | 108X61.5(246X246) D1B | |
| 518 | D905 | D1N4004S— | DIODE | 1N4004S | |
| 519 | D906 | D1N4004S— | DIODE | 1N4004S | |
| 520 | D907 | D1N4004S— | DIODE | 1N4004S | |
| 521 | D908 | DLT2A05G— | DIODE | LT2A05G (TP) | |
| 522 | J901 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 523 | J902 | 85801065GY | WIRE COPPER | AWG22 1/0.65 TIN COATING | |
| 524 | R901 | RD-AZ511J- | R CARBON FILM | 1/6 510 OHM J | |
| 525 | R902 | RD-AZ511J- | R CARBON FILM | 1/6 510 OHM J | |
| 526 | R903 | RD-AZ511J- | R CARBON FILM | 1/6 510 OHM J | |
| 527 | R905 | RD-4Z101J- | R CARBON FILM | 1/4 100 OHM J | |
| 528 | R906 | RD-4Z101J- | R CARBON FILM | 1/4 100 OHM J | |
| 529 | R907 | RD-4Z101J- | R CARBON FILM | 1/4 100 OHM J | |
| 530 | R908 | RC-2Z102K- | R CARBON COMP | 1/2 1K OHM K | |
| 531 | R909 | RC-2Z102K- | R CARBON COMP | 1/2 1K OHM K | |
| 532 | R910 | RC-2Z102K- | R CARBON COMP | 1/2 1K OHM K | |
| 533 | R912 | RC-2Z105KP | R CARBON COMP | 1/2 1M OHM K | |
| 534 | R913 | RD-2Z102J- | R CARBON FILM | 1/2 1K OHM J | |

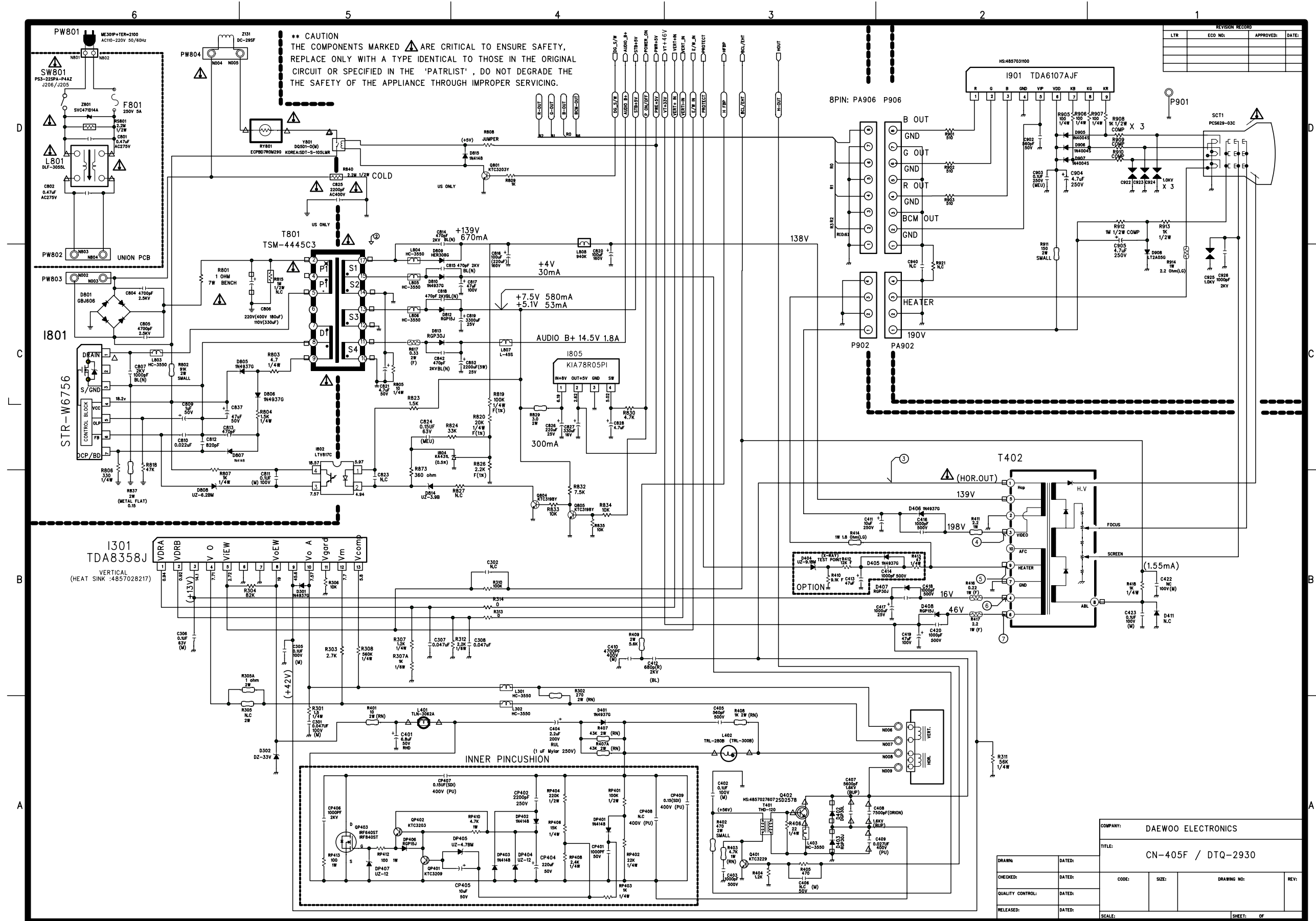
PRINTED CIRCUIT BOARD



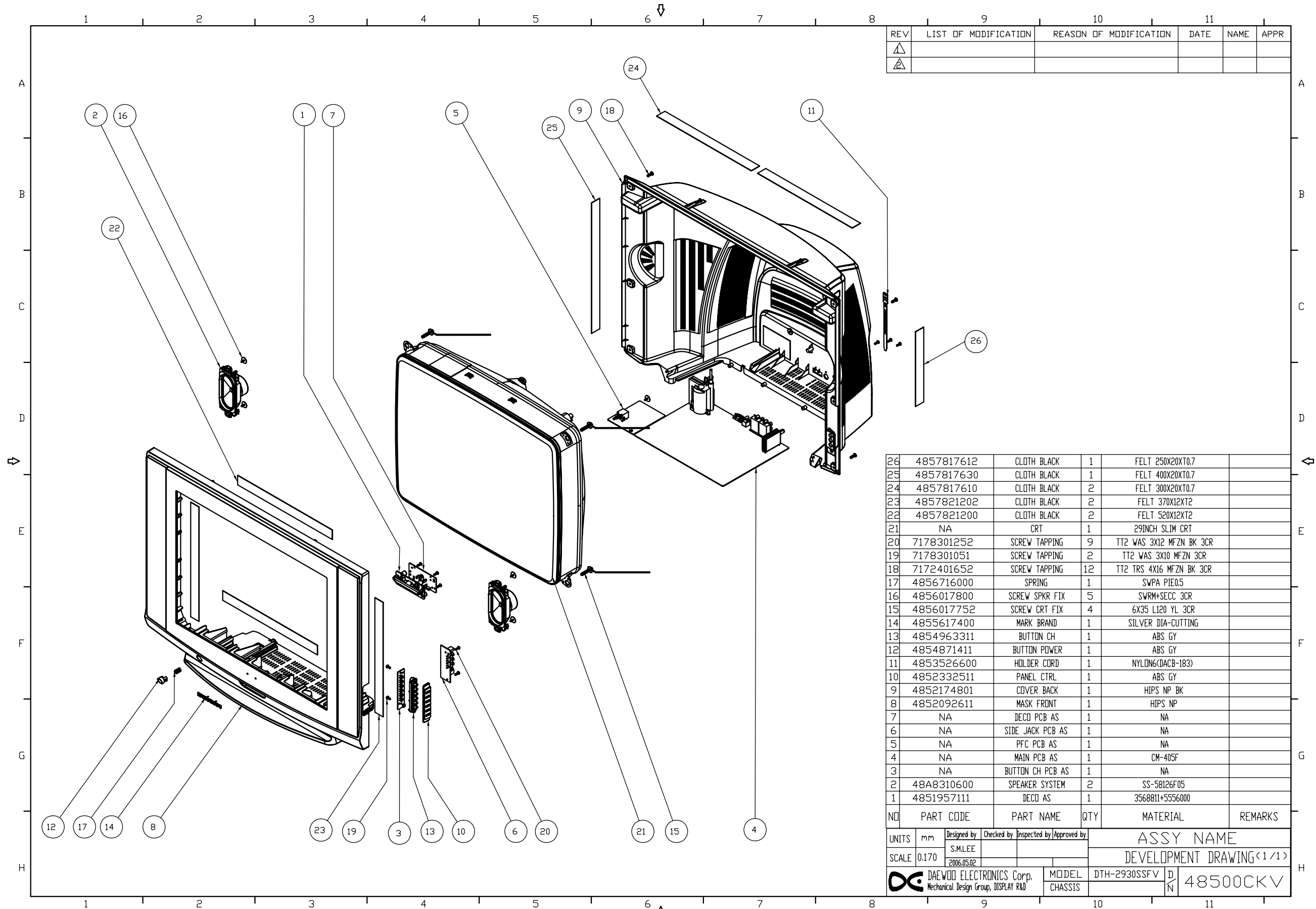
SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



EXPLODE VIEW



| REV | LIST OF MODIFICATION | REASON OF MODIFICATION | DATE | NAME | APPR |
|-----|----------------------|------------------------|------|------|------|
| △ | | | | | |
| △ | | | | | |

| | | | | | |
|----|------------|------------------|-----|--------------------------|---------|
| 26 | 4857817612 | CLOTH BLACK | 1 | FELT 250X20X0.7 | |
| 25 | 4857817630 | CLOTH BLACK | 1 | FELT 400X20X0.7 | |
| 24 | 4857817610 | CLOTH BLACK | 2 | FELT 300X20X0.7 | |
| 23 | 4857821202 | CLOTH BLACK | 2 | FELT 370X12X2 | |
| 22 | 4857821200 | CLOTH BLACK | 2 | FELT 520X12X2 | |
| 21 | NA | CRT | 1 | 29INCH SLIM CRT | |
| 20 | 7178301252 | SCREW TAPPING | 9 | TT2 WAS 3X12 MFZN BK 3CR | |
| 19 | 7178301051 | SCREW TAPPING | 2 | TT2 WAS 3X10 MFZN 3CR | |
| 18 | 7172401652 | SCREW TAPPING | 12 | TT2 TRS 4X16 MFZN BK 3CR | |
| 17 | 4856716000 | SPRING | 1 | SWPA PIE0.5 | |
| 16 | 4856017800 | SCREW SPKR FIX | 5 | SWRM+SECC 3CR | |
| 15 | 4856017752 | SCREW CRT FIX | 4 | 6X35 L120 YL 3CR | |
| 14 | 4855617400 | MARK BRAND | 1 | SILVER DIA-CUTTING | |
| 13 | 4854963311 | BUTTON CH | 1 | ABS GY | |
| 12 | 4854871411 | BUTTON POWER | 1 | ABS GY | |
| 11 | 4853526600 | HOLDER CORD | 1 | NYLON6(DACB-183) | |
| 10 | 4852332511 | PANEL CTRL | 1 | ABS GY | |
| 9 | 4852174801 | COVER BACK | 1 | HIPS NP BK | |
| 8 | 4852092611 | MASK FRONT | 1 | HIPS NP | |
| 7 | NA | DECO PCB AS | 1 | NA | |
| 6 | NA | SIDE JACK PCB AS | 1 | NA | |
| 5 | NA | PFC PCB AS | 1 | NA | |
| 4 | NA | MAIN PCB AS | 1 | CM-405F | |
| 3 | NA | BUTTON CH PCB AS | 1 | NA | |
| 2 | 48A8310600 | SPEAKER SYSTEM | 2 | SS-58126F05 | |
| 1 | 4851957111 | DECO AS | 1 | 3568811+5556000 | |
| NO | PART CODE | PART NAME | QTY | MATERIAL | REMARKS |

| | | | | | | | |
|-------|-------|--------------------------------------|------------|--------------|--------------|--------------------------|----------|
| UNITS | mm | Designed by | Checked by | Inspected by | Approved by | ASSY NAME | |
| SCALE | 0.170 | S.MLEE | | | | DEVELOPMENT DRAWING<1/1> | |
| | | DAEWOO ELECTRONICS Corp. | | MODEL | DTH-2930SSFV | D | 48500CKV |
| | | Mechanical Design Group, DISPLAY R&D | | CHASSIS | | N | |

A2(594mm X 420mm)



DAEWOO ELECTRONICS CORP.

686, AHYEON-DONG, MAPO-GU,
SEOUL, KOREA.
C.P.O. BOX 8003 SEOUL KOREA

PRINTED DATE : MAY. 2006